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**ALISHER NAVOIY – G‘AZAL MULKINING SULTONI****Tastanova Aylaza Aqilbek qizi**

Nizomiy nomidagi TDPU

Qozoq tili va adabiyoti ta'lim yo'nalishining 1-kurs talabasi

[sayfullayevbaurjan@gmail.com](mailto:sayfullayevbaurjan@gmail.com)**ANNOTATSIYA**

*O'zbek mumtoz adabiyoti taraqqiyotiga ulkan hissa qo'shgan, uni vorisilyikka tayangan holda yangi taraqqiyot pog'onasiga ko'targan, madaniyatimiz, tariximizda chuqur iz qoldirgan ijodkorlardan biri, shubhasiz, Alisher Navoiydir. Navoiy lirikasiga mutafakkir shoir, ramz va timsollar ta'sir etganini o'rganish, ularni qiyosiy tadqiq etish – shoir ijodining yangi qirralarini yoritish, shoirning individual uslubi, tili va badiiy-estetik mahoratini belgilashda muhim ahamiyatga ega ekanligi va bu boradagi qilingan ishlar to'g'risida maqolada keltirib o'tilgan.*

**Kalit so'zlar:** *Mutafakkir shoir, sharqshunos olimlar, badiiyestetik mahorat, ijodiy metod, navoiyshunoslik, adabiy an'analar, ilmiy-ommabop asarlar, nasriy tavsif, ruboiy.*

**АННОТАЦИЯ**

*Внес большой вклад в развитие узбекской классической литературы. поднят на новый уровень развития на основе преемственности, один из художников, оставивших, без сомнения, глубокий след в нашей культуре, в нашей истории, Алишер Навои. Традиционные образы, символы и эмблемы в лирике Навои изучать их влияние, сравнивать их - новая часть творчества поэта свещая грани, индивидуальный стиль поэта, язык и художественноэстетическое мастерство и работа, проделанная в этом направлении.*

**Ключевые слова:** *Поэт, мыслитель, востоковед, художественно-эстетическое мастерство, творческий метод, навоиведение, литературные традиции, научно-популярные произведения, прозаическое описание, рубай.*

### **ABSTRACT**

*He made a great contribution to the development of Uzbek classical literature raised to a new level of development based on succession, one of the artists who has left a deep mark on our culture, our history, without a doubt, Alisher Navoi. Traditional images, symbols and emblems in Navoi's lyrics to study their influence, to compare them is a new part of the poet's work illuminating the edges, the poet's individual style, language and artistic-aesthetic skills and the work done in this regard.*

**Keywords:** *Poet, thinker, orientalist, artistic and aesthetic skills, creative method, Navoi studies, literary traditions, popular science works, prose description, rubai.*

Buyuk o'zbek shoiri, mutafakkir, davlat arbobi, Alisher Navoiyning tavallud to'g'ri to'g'ri 583 yil bo'ldi. O'zbek xalqining buyuk shoiri, Sharqning donishmand mutafakkiri Alisher Navoiy 1441-yil 9-fevralda Hirot shahrida tug'ilgan. 1445 yili to'rt yoshida Navoiy bo'lajak sulton Husayn Boyqaro bilan ta'lim oladi. Navoiy bor-yo'g'i 11-12 yoshida turkiy, forsiy, arab tillarida g'azallar yozib tengdoshlarini hayratda qoldirga. Darvish Mansur ustoz qaramog'ida bilim olib, yanada yuksak bilim sohibiga aylandi. Nizomiy Ganjaviy, Sag'diy Sheroziy, Xusrav Dehlaviy kabi mashhur shoirlarning g'azallarini yod olgan. 1457 yili otasi G'iyosiddin olamdan o'tadi. O'n olti yoshli Navoiy umrning turli qiyinchiliklarini yolg'iz o'zi boshidan o'tkazadi. Chunki, ukasi Darvesh Ali hali yosh, onasi yuqori martabali avlodning farzandi bo'lsaham, hech bir lavozim egasi emas edi. Shunga qaramasdan Navoiy otasidan qolgan mol-mulkini madrasa, kutubxona va davolash maskanlarini qurishga sarf etadi. O'z uyida shogirtlariga adabiy she'rlar, g'azallar aytib darslar o'tkazib, muhtoj shogirtlariga sovg'alar bergan. Alisher Navoiy birqancha she'rlarini forsiy tilida ham yozgan. Shu sababli uning «Zullisonayn» degan ismi mashhur bo'ladi. Bu turdagi asarlarini to'plab



devon «Devoni Foni» tuzgan. Bu devoni forsiy til shoirlari, xususan, Jomiy tomonidan yuksak baholangan. Buyuk shoir turkiy tilida yozilgan she'rlarida «Navoiy», forsiy tilida yozilgan she'rlarida esa «Foni» tahallusi bilan ijod qilgan. Alisher Navoiy turkiy tiliga adabiy til maqomini berish, turkiy tili go'zal va boy ekanligini isbotlash uchun eski o'zbek tilida ko'plab she'rlar yozdi. Navoiy juda qisqa vaqt ichida bor-yo'g'i ikki yilda (1483-1485) «Xamsa», «Besh kitob» ga kiradigan «Hayrat ul-abror», «Farhod va Shirin», «Layli va Majnun», «Sab'ai sayyor», «Saddi Iskandariy» dostonlarini yozadi. Navoiy dunyoni hayratlantirgan «Xamsa» asarini turkiy-chig'atoy tilida yozdi. Shunday qilib Navoiy ilk bor turkiy tilida go'zal ijod qilgan. 1488-1501 yillari Navoiy o'zining adabiy, siyosiy, falsafiy, lingvistik ma'nosi yuksak bo'lgan asarlarini, go'zal g'azallarini kitobxonlarga havola etgan. Ular: «Tarixi Muluki Ajam», «Holoti Sayyid Hasan Ardasher», «Majoli un- Nafois» (Nafislar majlislari) Navoiy o'zining so'nggi asarida o'zidan oldin yashab o'tgan va zamondoshlari bo'lgan 450 nafar shoirning hayoti va ijodi haqida ko'p ma'lumotlar beradi va ularning she'rlaridan parchalar keltiradi. Navoiy aruz qasidasining tuzilishi haqida «Mezonul-avzon» nomli katta adabiy nazariy qimmatli asar ham yozadi. Shundan so'ng shoir didaktik-falsafiy «Lison ut-tayr», diniy tushuncha va urf-odatlar haqidagi lingvistik «Muhokamat ul-lug'atayn», «Tarixi anbiyo va hukamo» (Payg'ambarlar va olimlar), «Siroj-ul-muslimin» (Musulmonlar nuri) kabi ajoyib asarlar yaratdi. «Ular orasida, ayniqsa, «Muhokamat ul-lug'atayn» asari Navoiyning turkiy tilshunos olim sifatidagi uzoq yillik izlanishlari samarasi edi. Lirik shoir sifatida o'z nomini dunyoga tanitgan Alisher Navoiyning «Xazoyin ul-maoniy» she'riy to'plamidir. Shoir ushbu to'plamga kirgan she'rlarni shartli ravishda to'rtga ajratgan:

1. «G'aroyib ussig'ar» (Yoshlik g'aroyibotlari).
2. «Navodir ush-shabob» (Yigitlik nodirlik she'rlari).
3. «Badoye' ul-vasat» (O'rta yosh sherlari).
4. «Favoyid ul-kibar» («Keksalik foydalari»).

Yuqorida aytganimizdek, Alisher Navoiyning eng yaxshi asarlari besh dostonidan iborat «Hamsa» ekanligi ma'lum. U hech qachon o'z mohiyatini yo'qotmaydi, asrlar o'tishi bilan yana gullab yashnaydi.

Chunki Alisher Navoiy o'z asarlarida hokimlarning insofsizligi, zolimligini tanqid qiladi, adolat va axloqni ulug'laydi, halol mehnat va san'atni yuksak qadrlaydi. Shunday qilib, butun xalqni yomon ishlardan uzoqlashishini, yaxshilik bilan xursand qilish yo'llarini izlaydi. Hayotda jamiyat rivojini o'zgartirishga o'zining kuchi yetmasligini anglagan shoir bor kuchini she'riyat maydoniga qaratadi. Natijada u o'zining «Xamsa» («Besh») asarini yozishga e'tibor qaratadi. Chunki shoir insonni ijtimoiy hayotning eng yuqori pog'onasiga qo'yib, she'rlariga adolat, qadr- qimmat, yuksak aql-zakovat qo'shadi. Masalan: «Xamsa»ning birinchi kitobi «Xayrat ul Abror»da ham u mamlakatning hukmron tabaqasi uchun yagona saboq bo'ladigan ko'plab ibratli targ'ibot- tashviqotlarni ilgari surgan. U yerda bid'at va yovuzlik o'rtasidagi farqni turli misollar bilan chuqur tahlil qiladi va o'zining buyuk g'oyalarni ilgari suradi. Dostonda ham shayxlarning ikkiyuzlamachiligi, foyda uchun hamma narsaga boradigan beqarorligi qattiq tanqid qilinadi. U inson hayoti uchun zarur bo'lgan ehtiyotkorlik va saxovatlilik, odob va saxovatlilik, halollik va qanoat kabi g'oyalarni olib chiqadi. Shoir «Farhod va Shirin» dostonida ishq va halol mehnat hayotning yagona ozuqasi, hayot nafasi ekanligini ko'rsatsa, «Layli va Majnun» dostonida ishq qudratini har tomonlama tasvirlab beradi. Shu o'rinda ta'kidlab o'tish joizki, Amir Temurning nabirasi Xusayn Bayqaro 1469 yilda Hirot sultoni sifatida taxtga o'tirganida Alisher Navoiy Samarqandda edi. Xusayn Bayqaro yoshligida o'zi bilan birga o'qigan do'sti Alisher Navoiyni Hirotga taklif qiladi va undan o'zi bilan qolishini iltimos qiladi va uni davlat ishlariga jalb qila boshlaydi. Shundan so'ng, Alisher Navoiy muhr qo'riqchisi, vazir, Astrabod hokimi, Hirot bosh vazir bo'ladi. U Saroydagi hukmron tabaqa vakillarining firibgarligini va xiyonatlarni o'z ko'zi bilan ko'radi va ulardan hayratda qoladi. Hukmron tabaqa vakillarining zulmidan aziyat chekadi. Shunday qilib, u o'z she'rlarida odamlarni ahillik va hamjihatlikka, halol

mehnat va ezgu niyatga, pok tuyg‘u va pok muhabbatga, adolatli fuqarolikka da’vat etadi. Masalan: Alisher Navoiy bir she’rida:

«Bir g‘aribning ko‘nglini shod aylamak oncha borkim,

Ka’bani vayron o‘lsa obod aylagay», - deydi. Bu bilan insonning qalbi Alloh uyi uni buzish esa Ka’bani vayron qilish bilan barobar deydi. «Hayrat ul-abror» asarida ham adolatga bag‘ishlangan maxsus bob ham keltiradiki, bu bilan bu g‘oyaning naqadar ulug‘ligini, zarurligini uqtirmoqchi bo‘ladi. Shuning uchun ham uning sherlari o‘zidan keyingi shoir safdoshlariga ibrat bo‘ladi. Alisher Navoiy buyuk axloq va chin insoniylikni yuksak qadrlagan:

«Odamiy ersang demagil odami,

Oniki yo‘q xalq g‘amidin g‘ami», - deya insoniylik, halollikni hamma narsadan ustun deb biladi. Yana Alisher Navoiy: «Umringni behuda o‘tkazma, mehnat qil», - degan va mehnatning inson hayotidagi ahamiyatini ochib bergan, halol mehnatning ma’no va mazmunini yanada yuksak darajaga olib chiqqan. Shunday qilib, ulug‘ shoir halol, mehnatkash bo‘lish. va mehnatning tagi rohat ekanligini insoniyatga juda chiroyli tasvirlay olgan. Alisher Navoiy o‘zining «Xayratul-abror» («Yaxshi ko‘ngillar jasorati») asarida she’r mazmuni va shakliga alohida e’tibor berib, mazmunini sof oltin, deb hisoblagan, buyuk g‘oya muallifi - Mir Alisher Navoiy.

Xulosa qilib aytganda, mutafakkir Navoiyning hayotda qilgan ishlari, davlat arbobi sifatidagi faoliyati, xalqning turmushini yaxshilashga, og‘ir qismatini yengillashtirishga qo‘shgan savobli va xayrli ishlari, «Xamsa» asarining mazmun-mohiyati umuminsoniy va gumanistik ruh bilan sug‘orilgan. Mutafakkir insonparvarlik tushunchasiga ijtimoiy mazmun beradi. Ushbu dostonida kamtarlik, vafodorlik, nafsni tiyish, rostgo‘ylik, saxiylik, donolik, muhtoj va yetim-yesirlarga yordam berish, bag‘rikenglik, muloyimlik, shirinsuxanlik, shijoatkorlik, ezgulik, rahmdillik, odamiylik bularning hammasi insonparvarlikning tarkibiy qismi bo‘lib, insonni kamolot sari, ezgulikka yetaklaydi.



**FOYDALANILGAN ADABIYOTLAR RO‘YXATI**

1. Abduvalitov E. Aesthetic Education and Perception in the Teaching of Literature of Fraternal Peoples. <http://ijmmu.com> [editor@ijmmu.com](mailto:editor@ijmmu.com)
2. Abduvalitov N. Ways of Teaching Samples of World Literature at Literature Classes by Grene Features. <http://ijmmu.com> [editor@ijmmu.com](mailto:editor@ijmmu.com) ISSN 2364-5369 Volume 9, Issue 3 March, 2022 Pages: 219-223.
3. Nurjan B. Abduvalitov, Ergash B. Abduvalitov, Baurjan N. Sayfullaev. "METHODS OF COMPARATIVE ANALYSIS IN THE STUDY OF SAMPLES OF UZBEK AND WORLD LITERATURE" <https://spast.org/techrep/article/view/4576>
4. Nurumbeto‘vich, S.B. DISTINCTIVE FEATURES OF DIALECT PHRASEOLOGISMS IN UZBEK AND KAZAKH LANGUAGES. "ONLINE - CONFERENCES" PLATFORM, 94–97. Retrieved from. <https://papers.online-conferences.com/index.php/titfl/article/view/1241>
6. Nurymbetovich, S. B. (2023). Dialectisms in the Language of Literary Works. *Central Asian Journal of Literature, Philosophy and Culture*, 4(6), 33-39. Retrieved from <https://cajipc.centralasianstudies.org/index.php/CAJLPC/article/view/893>
7. Sayfulayev B. Some Problems of Phraseology of Turkic Languages (On the Example of Eye Phraseosomatizm). <http://dx.doi.org/10.47814/ijssrr.v5i4.263>
8. Sayfulayev B. Structural Features of Uzbek-Kazakh Dialectal Phrasemas. <https://cajssh.centralasianstudies.org/index.php/CAJSSH/article/view/311>
9. Yusupov B.B. Motherland and Patriotism in the Lyrics of Tulegen Aibergenov. <https://ijssrr.com/journal/issue/view/28>
10. Дуйсабаева Д. Formation of Linguo-Culturological Competence of Future Native Language Specialists. <https://ijssrr.com/journal/issue/view/21>.

## GLOBALLASHUV DAVRIDA TA'LIM TIZIMI MUAMMOLARI

**Raximov Oktyabr Dustkabilovich**

Qarshi muhandislik iqtisodiyot instituti professori

### KIRISH

Hozirgi kunda XXI asr yuksak texnologiyalar zamoni, tafakkur asri, yalpi axborotlashuv asri, globallashuv davri deb ta'rif etilmoqda. "Globallashuv" atamasi dastlab amerikalik olim T.Levittning 1983 yili «Garvard biznes revyu» jurnalida chop etilgan maqolasida tilga olingan. Muallif yirik transmilliy korporatsiyalar ishlab chiqaradigan turli-tuman mahsulot bozorlarining birlashuv jarayonini shunday deb atagan. Lekin hozirgi davrda globallashuv boshqacha ma'no va ahamiyat kasb etmoqda [1].

Globallashuv - insoniyatning ongu-shuuri va tafakkuri samarasi sifatida vujudga kelgan jahon miqyosidagi umumiy jarayon. U chegara va hududlarni bilmaydigan, tuzumlarni tan olmaydigan, uzluksiz kuchayib va rivojlanib borayotgan, axborotlashgan jamiyatga o'tish jarayonidir. Bunday jamiyatda faqat inson tafakkuri yetakchi o'rin egallaydi. Tafakkur –jamiyat taraqqiyoti darajasini ko'rsatuvchi oyna. Bu oynada muvaffaqiyatlar ham, kamchiliklar ham ayon ko'rinadi. Sir emaski, insonning nechog'lik mukarramligi, komilligi fikrlash darajasi, tafakkuri bilan belgilanadi. Axborotlar inson tafakkuri va fikrlash qobiliyatini qay darajada shakllanishiga ta'sir etuchi asosiy omildir. Shu sababli zamonaviy sivilizatsiyalashgan jamiyatning hozirgi davrdagi rivoji axborotlashtirish jarayoni bilan xarakterlanadi [2].

### TADQIQOT METODLARI

Tadqiqot jarayonida ilmiy va o'quv-uslubiy adabiyotlar tahlili, pedagogik kuzatuv, qiyosiy tahlil, umumlashtirish, pedagogik tajriba-sinov va forsait metodlaridan foydalanildi.

## TADQIQOT NATIJALARI VA MUHOKAMALAR

Intellekual boylik va salohiyat manbasi, uni rivojlantirish omili ta'lim-tarbiya jarayonining sifati hisoblanadi «Biz yashayotgan XXI asr – intellektual boylik hukmron qiladigan asr [3]. Kimki bu haqiqatni o'z vaqtida anglab olmasa, intellektual bilim, intellektual boylikka intilish har qaysi millat va xalq kundalik hayot mazmuniga aylanmasa, bunday davlat jahon taraqqiyoti yo'lidan chetda qolib ketishi muqarrar».

*Yuqoridagi fikrlardan xulosa o'rnida shunday savol tug'iladi?*

*Nima uchun ta'lim sifati insoniyatning barcha hayotiy-muhim faoliyatlariga ta'sir etadi?*

**Birinchidan**, insoniyat sivilizatsiyasi barcha sohalarda, jumladan ta'lim tizimida ham global o'zaro bog'liqlik darajasigacha erishdi. Hozirgi kunda bitta davlat yoki millatning muammosi butun jahon rivojiga katta ta'sir etishi mumkin. Yuzaga kelgan ekologik, iqtisodiy, siyosiy muammolar va inqirozlarning yechimi faqatgina insoniyatdan kelajakda aqliy va ma'naviy rivojlanishni talab etadi. Bunga esa faqatgina to'g'ri va sifatli ta'lim tizimini yo'lga qo'yish orqaligina erishish mumkin [4,5].

**Ikkinchidan**, ta'limning asosiy yo'nalishi tarbiyaga borib taqaladi. Tarbiya o'ta muhim, o'ta murakkab va o'ta dolzarb masala bo'lib kelgan va bo'lib qoladi.

Abdulla Avloniyning "Turkiy Guliston yoxud axloq" kitobidagi "Tarbiyaning zamoni" bobida shunday jumlar bor. "Emdi ochiq ma'lum bo'ldiki, tarbiyani tug'ilgan kundan boshlamak, vujudimizni quvvatlanturmak, fikrimizni nurlanturmak, axloqimizni go'zallanturmak, zehnimizni ravshanlanturmak lozim ekan. Tarbiyani kimlar qilur, qayda qilinur? - degan savol keladur. Bu savolga "birinchi – uy tarbiyasi. Bu ona vazifasidur. Ikkinchi - maktab va madrasa tarbiyasi, bu ota, muallim, mudarris va hukumat vazifasidur"- deb javob bersak [6].

Aynan ana shu maktab va madrasa tarbiyasini avval ham, hozir ham muallim-pedagoglar amalga oshirib kelishgan. Bizningcha, tarbiyada atrof-muhit ta'siri ham yetakchi o'rinni egallamoqda. Bolalar ko'proq eshitganini yoki o'qiganini emas, balki ko'rganini qilishga harakat qilishadi.

*Xo'sh, bizning o'zimiz bolalarga tarbiya bobida o'rnak bo'la olamizmi? Bolalar bizdan nimalarni o'rganishmoqda? Global Internet tizimidagi ma'lumotlar tarbiya bobida qanday o'rin egallamoqda? Internetga ma'lumotlarni, ya'ni tarbiyaga salbiy ta'sir etuvchi axborotlarni bolalar joylashtirmoqdami yoki kattalar? Balki, biz tarbiyani va ta'limni avvalo o'zimizdan boshlashimiz kerakdir? Demak, bir so'z bilan aytish mumkinki, ta'lim –tarbiya sifatli bo'lishi uchun biz o'zimiz(pedagoglar) sifatli ta'lim berishga munosib bo'lishimiz zarurdir.*

**Uchinchidan,** insoniyatning barcha hayotiy muhim munosabatlari (siyosat, iqtisodiyot, ijtimoiy va b.) – insonlar o'rtasidagi o'zaro bog'liqlik va o'zaro ta'sirga bog'liq holda shakllanadi hamda rivojlanadi. Ta'lim sifatiga bog'liq holda ushbu munosabatlar darajasi va albatta siyosiy-iqtisodiy munosabatlar ham o'zgaradi [7].

Yuqorida keltirilganlardan xulosalash mumkinki, bugungi kunda dunyoda yuzaga kelayotgan barcha muammolar ildizi ta'lim-tarbiya tizimidagi sifat nuqsonlari natijasi desak xato bo'lmaydi.

Barcha muammolarni faqatgina yuksak darajadagi ong, to'g'ri tafakkur va beqiyos bilim, yuksak ma'naviyat va ma'rifat yo'li bilangina hal etish mumkin. Buning yechimi ta'lim-tarbiyaga e'tiborni yanada oshirish, bu sohaga yanada ko'proq mablag' ajratish orqali ta'lim sifatini yuksaltirish bilan hal etilishi mumkin [8]. Lekin, ta'kidlash joizki, ta'lim sohasidagi islohotlarning yanada ijobiyligi pedagoglarning globallashtirish va axborotlashgan jamiyat ta'lim tizimi mazmun-mohiyatini nechog'lik tushunib yetishlariga va qanchalik astoydil bajarishlariga ham bog'liqdir.

Yuqoridagilardan kelib chiqib, savollar tug'iladi:

- *ta'lim sifatining asosiy mazmuni va uni belgilovchi mezonlar nimalardan iborat?*
- *nega, hozirgi kunda "ta'lim sifati-hayot sifati!" deb e'tirof etilmoqda?*
- *zamonaviy axborot va pedagogik texnologiyalarning ta'lim sifatini oshirishdagi o'rni qanday?*
- *hozirgi axborot texnologiyalari davrida ta'lim sifatini ta'minlash uchun qaysi uslubdan foydalanish o'rinli?*

- *zamonaviy pedagogik texnologiyalar va o'qitish uslublarining mazmun-mohiyati nimadan iborat?*

- *hozirgi globallashtirish va axborotlashgan jamiyat ta'lim tizimida ta'lim-tarbiya sifatini qanday ta'minlash, zamon ruhiga mos holda qanday o'zgartirish mumkin?*

Birinchi navbatda global Internet va masofaviy ta'lim imkoniyatlari hamda xalqaro ta'lim standartlari talablarini hisobga olgan holda ta'lim-tarbiya sifatini ta'minlashning butunlay yangi tizimini ishlab chiqish zarur. Hozirgi kundagi ta'lim mazmuni ko'proq ishlab chiqarishda yuksak iqtisodiy samara olish, insonning shaxsiy manfaatlarini mumkin qadar to'liqroq qondirish masalalariga qaratilgan. Yoki boshqacha aytganda ayrim hollarda, har qanday bilim zaminida yuqori iqtisodiy samara va foyda olish yo'llarini izlash yotmoqda [10,11].

Biz bolalarimizni yuksak ma'naviy ruhda tarbiyalashga har qancha harakat qilsakda, manfaatdorlik negizidagi muhit to'sqinlik qilishi mumkin.

Har bir ota-ona o'z farzandini hech kimdan kam bo'lmasligini istaydi, oliy ma'lumot olishini va yaxshigina daromadli ishga joylashishini birinchi o'ringa qo'yadi! Lekin, aslida ta'lim-tarbiya jarayoni inson ma'naviyatini yuksak darajada shakllanishiga va rivojlanishiga xizmat qilmog'i lozim. Ya'ni, ta'lim-tarbiya tizimi faqatgina insoniyatning moddiy va ma'naviy manfaatlarini qondirishga xizmat qilmasdan, balki uning ruhini, iymon-e'tiqodini, irodasini, vijdonini poklanishiga, haqiqiy insoniy tuyg'ularni shakllanishiga xizmat qilmog'i zarur [12].

O'qish va bilim olish- insonning boshqa kundalik ehtiyojlari (yuvinish, kiyinish, ovqatlanish va b.) kabi har bir kishining ongli ravishda kundalik ehtiyojiga aylanmog'i kerak.

Ta'lim sifatini ta'minlashning asosiy yo'nalishlari o'quv jarayoniga zamonaviy axborot-kommunikatsiya texnologiyalari va innovatsion pedagogik texnologiyalarni keng foydalanish hisoblanadi.

Hozirgi kunda raqamli texnologiyalarning izchil rivojlanishi ta'lim tizimini xalqaro ta'lim muhiti talablariga javob berishi zarurligini taqozo etmoqda. Ta'limda axborot va telekommunikatsiya texnologiyalaridan foydalanish masofaviy ta'limning



yuzaga kelishiga sharoit yaratdi. Shuningdek, ta'lim jarayonini xalqaro ta'lim jarayoniga aylanishiga asos bo'lmoqda [13,14,15].

### **XULOSALAR**

Yuqorida keltirilgan ma'lumotlar asosida qo'yidagi xulosalar va tavsiyalarni taklif etamiz:

1. Ta'lim ijtimoiy hayotning muhim sohasi hisoblanadi. Aynan ta'lim jamiyatning intellektual, madaniy va ma'naviy darajasini shakllantiradi.

2. Hozirgi kunda har qanday davlatning kuchi-qudrati, rivojlanish darajasi, undagi ijtimoiy-siyosiy muhit ushbu davlatning intellektual salohiyati bilan belgilanadi. Intellektual salohiyatning o'sishi esa asosan ta'lim sifati bilan baholanadi.

3. Globallashuv davrida yuzaga kelayotgan ekologik, ijtimoiy-siyosiy va iqtisodiy muammolar hamda inqirozlar va ularning yechimlari ta'lim sifatiga bog'liq holda shakllanadi va rivojlanadi.

4. Har qanday davlat ta'lim sohasi sifatiga qanchalik ko'p e'tibor qaratsa, qanchalik ko'p mablag' sarflasa va natijasi eng yuqori xalqaro standartlarga javob bersa, ushbu davlatda hayot sifati shunchalik yuqori bo'ladi.

5. Ta'lim sifatini oshirishning asosiy omillaridan biri ta'lim jarayoniga zamonaviy axborot-kommunikatsiya va innovatsion pedagogik texnologiyalarni keng joriy etishdan iboratdir.

6. Ta'lim sifatini oshishi va dunyoda yagona ta'lim tizimi hamda maydonini shakllanishi o'zaro uzviy bog'liq jarayonlardir.

7. Ta'lim sifati muammosi tugallangan yechimga ega emas soha hisoblanadi. Davlat va jamiyat rivojlanishining har bir bosqichida ta'lim tizimiga o'ziga xos yangi shart-sharoitlar va talablar yuzaga keladi, ta'lim sifati mezonlari o'zgaradi va bu masalani hal etish uchun tizimli tadqiqotlar olib borish talab etiladi.

8. Ta'lim sifatini oshirish chegara bilmas sohadir. Shu sababli hozirgi kunda ta'lim sifatining o'sish dinamikasini to'g'ri baholash, uning mezonlarini aniq belgilash va kelajak ta'lim sifati ko'rsatkichlarini oldindan bashorat qilish, rejalashtirish o'ta muhim va dolzarb masala hisoblanadi.

9. Ta'lim sifati davlat va jamiyatning ijtimoiy –iqtisodiy o‘shish, rivojlanish darajasiga bog‘liq holda o‘zgaruvchan bo‘lganligi sababli, uni aniqlash hamda kelajak ko‘rsatkichlarini oldindan baholashning yagona, mukammal uslubiyoti ishlab chiqilmagan.

### ADABIYOTLAR

1. Klarin M.V. Innovatsii v mirovoy pedagogike.-Riga, 1995
2. Rakhimov O. D., Murodov M. O., Ruziev X. J. Quality of education and innovative technologies //Monograph. Tashkent: Science and Technology Publishing House. – 2016.
3. Raximov O. D. i dr. Zamonaviy ta'lim texnologiyalari //T.:“Fan va texnologiya nashriyoti. – 2013.
4. Rakhimov O. et al. Positive and negative aspects of digitalization of higher education in Uzbekistan //AIP Conference Proceedings. – AIP Publishing, 2022. – T. 2432. – №. 1.
5. Polat Ye.S., Buxarkina M.Yu. Sovremennyye pedagogicheskie i informatsionnye texnologii v sisteme obrazovaniya. /M.: «Akademiya», 2008
6. Rakhimov O. D., Chorshanbiev Z. E. Prospects for the application of digital technologies in training the "labor protection" course //European Journal of Life Safety and Stability (2660-9630). – 2021. – T. 2. – S. 34-40.
7. Guzeev V.V. Planirovanie rezultatov obrazovaniya i obrazovatel'naya texnologiya. M.: Narodnoe obrazovanie, 2000.
8. Rakhimov O. D. et al. Klassifikatsiya pedagogicheskikh tekhnologiy i tekhnologiya problemnogo obucheniya //Problemy sovremennoy nauki i obrazovaniya. – 2020. – T. 2. – №. 147. – S. 59-62.
9. Kurdyumova I.M. Otsenka kachestva professionalnogo obrazovaniya v Velikobritanii. – M.: Izdatelskiy sentr NOU ISOM, 2003. 36 s.
10. Rakhimov O. D. et al. Unused opportunities: distance education in Uzbekistan //Scientific journal. – 2021. – №. 3. – S. 58.

11. Yakovleva N.O. Teoretiko-metodologicheskie osnovy pedagogicheskogo proektirovaniya. M.: Izd-vo ATiSO, 2002. - 239 s.
12. Kodjaspirova G.M. Istoriya obrazovaniya i pedagogicheskoy mysli: Tablisy, sxemy, oornyye konspekty: uchebnoe posobie dlya studentov vysshix uchebnykh zavedeniy. /M., 2003.
13. Rakhimov O.D., Berdiyev Sh.J., Rakhmatov M.I., Nikboev A.T. Foresight In The Higher Education Sector of Uzbekistan: Problems and Ways of Development. //Psychology and Education Journal .2021. 58 (3), P.957-968. DOI: 10.17762/pae.v58i3.30294.
14. Savenkov A. I. Tvorcheskiy proekt, ili kak provesti samostoyatelnoe issledovanie. // Shkolnyye texnologii. - 1998. № 4. - S. 144-148.
15. Raximov O. Elektron ta'lim resurslarini yaratish talablari va texnologiyasi //Sovremennoe obrazovanie (Uzbekistan). – 2016. – №. 2. – S. 45-50.

## НЕКОТОРЫЕ СООБРАЖЕНИЯ О ВЫРАЖЕНИИ ОТНОШЕНИЙ ЧАСТЕЙ В МОНОСУБЪЕКТИВНЫХ ПОЛИПРЕДИКАТИВНЫХ ПРЕДЛОЖЕНИЯХ

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### **АННОТАЦИЯ**

*В данной статье рассматриваются отношения между предикатными частями предложений с двумя предикатами, как некоторые языковеды называют их моносубъектными полипредикатными предложениями.*

**Ключевые слова:** *полипредикатные предложения, моносубъектные предложения.*

### **ABSTRACT**

*This article examines the relationship between the predicate parts of sentences with two predicates, as some linguists call them monosubject polypredicate sentences.*

**Keywords:** *polypredicate sentences, monosubject sentences.*

Моносубъективные полипредикативные предложения (далее — «МС ППП») — это предложения, которые содержат одно подлежащее, то есть одного подлежащего, и как минимум два предиката управляют своими второстепенными частями: *Омон был так зол, что искал того, кто причинил боль ему.* В этом предложении имеется одно подлежащее (*Омон*) и два сказуемых (*зол и искал*) с их придаточными предложениями. Мы называем такие предложения МС ПП. В этом небольшом исследовании мы проанализировали

МС ПП, предикаты которых взаимозависимы. Зависимые отношения в этих предложениях можно разделить на следующие типы:

**1. Объектное отношение.** В этом случае объект, выраженный первой группой предикатов, объясняется второй группой предикатов через объектное отношение: *Я чувствую, что старею на один год за неделю из-за индийского воздуха. (П.К.)* Хотя подлежащее в предложении не выражено специальным словом, его можно восстановить в зависимости от предикатов. Содержимое первого предиката (*я вижу*) заполняется вторым предикатом.

**2. Причинно-следственная связь.** При этом в зависимости от места предикатов могут быть выражены два различных отношения: 1) первая группа предикатов объясняет причину второй группы предикатов: *У меня не было никакого образования, кроме медресе, поэтому я ничего не могу с этим поделатъ. (А.К.)* 2) второе сказуемое объясняет причину первого сказуемого: *Вы имеете право смеяться, домла, потому что вы мстите! (А. Код.)*

**3. Уступительные отношения.** В этом случае событие, выраженное первой группой сказуемых, не может быть препятствием событию, выраженному вторым сказуемым: *Хотя Махдум был удовлетворен тем, что у земледельца родился ребенок, он не был удовлетворен Анваром (А. Код.).*

**4. Аналогично-сравнительная связь.** В данном случае события, представленные обеими группами предикатов, схожи: *Анвар был так же бодр, как и при выходе, но был бодр, когда шел на смерть (А.Код.),*

**5. Условное отношение.** В этом случае для того, чтобы хоса, выраженная второй группой сказуемых, исполнилась, должно произойти событие, выраженное первой группой сказуемых: *Если бы вы лечились в нашей больнице, вы были бы в курсе совхозных дел (Г.Г.).*

**6. Отношение результата.** В этом случае результат события, выраженного первой группой сказуемых, отражается второй группой сказуемых: *Бабир был настолько ужаснулся от этой мысли, что собрал все свои силы и встал. (П.К.)*



**7. Атрибутивное отношение.** В этом случае знак первого сказуемого объясняется второй группой сказуемых: *Сама Бегим такая поэтесса и любит поэтов , что заучивают наизусть все газели Джами и Навои. (П.К.)*

**8. Отношение времени.** При этом первая группа предикатов желает, чтобы момент события был выражен второй группой предикатов: *Когда он открывает глаза, он видит, что его вырывают из земли (А. Код.).*

**9. Количественная связь.** Здесь количественно сопоставляются события, представленные обеими группами предикатов (следовательно, имеется и сравнительная связь): *Чем больше Махдум был рад получить семь золотых «наличных», тем больше он волновался.(А) .Код.)*

**10. Аниқлов, изоқлов муносабати.** Бунда биринчи предикат гурухи орқали ифодаланган фикрга иккинчи предикат гурухи томонидан яна-да аниқлик киритилади: *Даҳшатли бир “чиртинг-пиртинг” олдиди бош эгади, яъни Мулла Обидга имо ичида салом бериб, ... ялтоқланиб қўяди. (А.Қод.)*

**10. Определительно-интерпретационное отношение.** В данном случае мысль, выраженный первой группой предикатов, дополнительно уточняется второй группой предикатов: *Он кланяется перед страшным «чиртинг - пиртингом», то есть жестом приветствует Муллу Обида и... льстит ему. . (А. Код)*

**11. Релятивное отношение.** Как реализуется событие, представленное второй группой предикатов, поясняет первый предикат: *После этого ответа Абдурахман впал в ярость и проклял свою судьбу (А. Код).*

Видно, что отношения между предикатами МС ППП различны. Их основной характеристикой является то, что одна группа предикатов интерпретирует другую группу предикатов, что приводит к отношениям зависимости.

Из вышеизложенного можно сделать следующие выводы:

1. Между предикатами МС ППП существует подчинительная связь.
2. Это отношение подчинения проявляется в разных формах.

3. Эти отношения аналогичны отношениям между предложениями в традиционной лингвистике, которые называются главными и придаточными предложениями. Разница в том, что предикаты в МС ППП привязаны к одному субъекту.

4. С другой стороны, эта связь аналогична связи между обстоятельством и сказуемым.

### Использованная литература

1. Ф.Абдурахмонов. Қўшма гап синтаксиси асослари. Т., 1958. 15-бет.
2. Ўзбек тили грамматикаси. 2-қисм. Т., 1976. 202-206 б.
3. Аширбоев С. Алишер Навоийнинг насрий асарларидаги содда гапларнинг таркибий ва маъно хусусиятлари. ДДА, Т., 1990. Есенов Х. Синтаксис осложненного предложения в казахском языке. Алмаата, 1992
4. Юқоридаги асар, 37-бет.
5. Х.Нигматов, К.М.Абдуллаев, В.И.Банару, Н.М.Махмудов, Д.А.Мухамедова, А.Нурманов. Структура предложения и актуальные вопросы синтаксиса тюркских языков (тезиси формально-функционального исследования) “Советская тюркология” 1984, № 5 с.7.

## НЕКОТОРЫЕ СООБРАЖЕНИЯ О СПОСОБАХ СОЕДИНЕНИЯ ЧАСТЕЙ МОНОСУБЪЕКТИВНЫХ ПОЛИПРЕДИКАТИВНЫХ ПРЕДЛОЖЕНИЙ

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### **АННОТАЦИЯ**

*В данной статье рассматриваются способы соединения частей моносубъективных полипредикативных предложений: с помощью сочинительных союзов, с помощью слов в функции сочинительных союзов, посредством интонаций, с помощью сложноподчинённых союзов или слов в функции сложноподчинённых союзов.*

**Ключевые слова:** *моносубъектные полипредикатные предложения, сочинительные союзы, подчинительные союзы.*

### **ABSTRACT**

*This article discusses ways to connect parts of monosubjective polypredicative sentences: using coordinating conjunctions, using words as coordinating conjunctions, through intonation, using complex conjunctions or words as complex conjunctions.*

**Keywords:** *monosubjective polypredicate sentences, coordinating conjunctions, subordinating conjunctions.*

Перед наукой узбекского языкознания, особенно учеными-синтаксисами, предстоит решить еще немало проблем. Некоторые из наших ученых прокомментировали некоторые из них.

Например, узбекский языковед доктор филологических наук, профессор Н. Махмудов в своей статье, посвященной актуальным вопросам семантического синтаксиса, задумывается о ряде проблем, требующих рассмотрения или решения.

На наш взгляд, одной из таких проблем является проблема моносубъективных полипредикативных предложений.

Моносубъективные полипредикативные предложения (сокращенно: МС ППП) мы имеем в виду предложения, которые имеют, грамматически говоря, одного подлежащего (логически говоря, один субъект) и имеют более одного сказуемого. Например: *Тем не менее, поскольку Навои был знаком с Бабуром и издали интересовался его судьбой, он был в курсе, что уже однажды он брал Самарканд (П.К.).* В данном примере подлежащим является слово *Навои*, а предикатов три: *знаком, интересовался, был в курсе*. На первый взгляд такие предложения подобны предложениям с придаточной, но каждое сказуемое в них, в свою очередь, управляет несколькими второстепенными членами предложений, и в этом отношении они отличаются от предложений с придаточной.

МС ППП могут быть сложносочиненными и сложноподчиненными предложениями.

МС ППП, образованные на основе отношений равенства частей, напоминают сложносочиненные предложения: *Мунисхан была готова снова заплакать, как в ту брачную ночь, но взяла себя в руки и закрыла лицо под предлогом смеха.* Из примера видно, что части предложения соединяются при помощи сочинительных союзов (но, и), но все три сказуемых (была готова, поймала, спряталась) по содержанию и грамматически связаны с одним подлежащим (Мунисханом). В этом отношении такие предложения отличаются от сложносочинённых предложений.

При соединении частей МС ППП на основе равноправных отношений они соединяются с помощью сочинительных союзов, или слов, выступающих в роли сочинительных союзов, а также с помощью интонацией.

### **1. МС ППП, части которых соединены с помощью сочинительных союзов.**

В этом участвуют следующие сочинительных союзов:

**а) соединительные союзы:**

*Салтанат подошла, закрыла двери и постояла немного на пороге, прислушиваясь к шагам спускающегося по лестнице Юлдаша.*

**б) противительные союзы:**

*Почувствовав это, Саиди сделал вид, что серьезно задумался, **но** теперь он не мог видеть не только этого слова, но и книги. (А.К.)*

**в) разделительные союзы:**

*Ты когда-нибудь слышал, что плакать — это хорошо, **или** ты пытаешься заставить меня тоже плакать? (А. Код)*

**2. МС ППГ, части которых соединены посредством слов в функции сочинительных союзов.****1) в этой функции выступают:**

**а) частицы:** *Баҳор серёмғир келгани мол-ҳолга яхиши бўлди-ю экинларга жабр қилди. (Ў.Х.)* перевод на русский язык: *Весенний дождь пошел на пользу скоту, **но** повредил посевы (О'.Х.)*

**б) слово «бир» в смысле «или»:** *Беруни, или грустит, вспоминая годы, проведенные в Журжане или вздыхает, думая о будущей разлуке. (А.Я.)*

**в) слово «ҳам» в значении сочинительного союза «и»:** *Сам хороший человек, твой ровесник и защитил меня (А.)*

**3. МС ППП, части которого соединены интонацией.**

МС ППП сочинительного характера могут соединяться посредством интонации:

*Кудрат с головой ушел в работу, занят своими новыми планами (Дж. Абд.)*

Семантические отношения между частями ППГ, имеющими одно и то же отношение, аналогичны отношениям между частями сложносочинённых предложений: эти части могут представлять одновременные или последовательные события, противительные отношения, отношения изложения.



Тобе муносабатли МС ППГ лар мазмуний муносабат жихатидан эргашган кўшма гапларга ўхшаб кетади. Бундай гапларнинг қисмларини боғловчи воситалар ҳам кўшма гапларниқига ўхшайди:

МС ППП подчинительного отношения аналогичны сложноподчинённым предложениям. Способы соединения частей таких предложений аналогичны способам соединения сложноподчинённых предложений:

**1) МС ППП, части которых соединены с помощью подчинительных союзов.**

а) определительные союзы: *Аваз знал, что справится с этой работой.*

б) причинные союзы: *У меня не было никакого образования, кроме медресе, поэтому я ничего не могу с этим поделать. (А.К.)*

**1) қисмлари эргаштирувчи боғловчилар вазифасидаги воситалар ёрдамида боғланган МС ППГ лар.**

**1)МС ППП, части которых соединены посредством слов в функции подчинительных союзов.** В этом случае в функции соединительного средства участвуют депричастие, причастие и сослагательные формы глагола: *Девочки приходя по очереди, взяли по одному платку и стали снимать с голов свои белые шали (Ж. Абд.).*

Из вышеизложенного можно сделать следующие выводы:

1. Способы соединения зависимых частей МС ППП аналогичны способам соединения сложноподчинённых предложений.

2. Части МС ППП сочинительного характера соединяются посредством сочинительных союзов или слов той же функции, а МС ППП подчинительного характера соединяются посредством подчинительных союзов или слов той же функции.

**Фойдаланилган адабиётлар рўйхати:**

1. Маҳмудов Н. Ўзбек тили синтаксисининг долзарб масалалари // “Ўзбек тили ва адабиёти”, 1990 йил, 2-сон, 23-27 бетлар.

2. Раупова Л. Ўзбек тилида номустақил кесим масаласи ва [WPm – WPm] қурилишидаги гаплар. НДА, -Т., 1999.
3. Н.С.Валгина. Синтаксис современного русского языка. М., 1991, с.228.
4. Аширбоев С. Алишер Навоийнинг насрий асарларидаги содда гапларнинг таркибий ва маъно хусусиятлари. ДДА, Т., 1990.

## PREPOSITIONS IN ENGLISH GRAMMAR AND ITS MEANING

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### ANNOTATION

This article attempts to discuss the meaning, definition and the use of prepositions. There are also examples of prepositions given to understand how they are used in sentences. The preposition is employed in sentences to show the relationship nouns, pronouns or phrases have with other parts within the respective sentences.

**Keywords:** prepositions, using, nouns, pronouns, verbs, phrases.

## ПРЕДЛОГИ И ИХ ЗНАЧЕНИЯ В АНГЛИЙСКОЙ ГРАММАТИКЕ

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### АННОТАЦИЯ

В этой статье делается попытка дать определение значению и использованию предлогов. Также приведены примеры предлогов и их использования в предложениях. Предлог используется в предложениях, чтобы показать связь произносимых существительных или фраз с другими частями речи в соответствующих предложениях.

**Ключевые слова:** предлоги, использование, существительные, местоимения, глаголы, фразы.

**Introduction.** Prepositions are indeed a crucial part of English grammar, as they help establish relationships between different elements in a sentence. Here's a comprehensive overview of prepositions and their usage. There is no reliable formula for determining which preposition to use with a particular combination of words. The best way to learn which prepositions go with which words is to read as much high-quality writing as you can & pay attention to which combinations sound right.

What is a Preposition? A preposition is a word that typically comes before a noun, pronoun, or noun phrase and shows the relationship between that noun or pronoun and other words in a sentence. Preposition is defined as "a function word that typically combines with a noun phrase to form a phrase which usually expresses a modification or predication.

**Common Prepositions:** Many prepositions are made up of only one word and are called simple or common prepositions. Some common prepositions include short & very common words like: about, above, across, after, against, along, amid, among, around, at, before, behind, below, beneath, beside, between, beyond, but, by, despite, down, during, except, for, from.

### Complex Prepositions

In general, the syntactic function of prepositions is to express a relationship between two entities; in this way they are similar to coordinating conjunctions & sentence transitions, which mark a relationship between ideas in two sentences. Complex prepositions are those that consist of more than word-usually of two or three words (e.g., as for, except for, in line with, according to, along with, as well as, because of, close to, due to, far from, respect to).

**Usage of Prepositions:** Prepositions are seen to show some key characteristics & perform some vital functions when used in sentences. Let us look at the various uses of prepositions in English. Prepositions can be divided into different types by

categorising them according to their functions. Prepositions are often used to indicate where something is located or the direction of movement. For example: The book is on the table. She walked across the bridge.

Prepositions can indicate when something happens. (time) For example:  
We'll meet at 3 o'clock. They arrived before the party started.

Prepositions indicate the direction of movement. (direction) For example:  
He walked into the room. She jumped over the fence.

Prepositions can indicate the reason for something. (cause) For example:  
He failed because of his laziness. They won thanks to their hard work.

Prepositions indicate ownership or possession. For example: The keys are on the table.

This is a book of mine.

Prepositions can indicate the doer of an action. (agent) For example:  
The book was written by Shakespeare. The gift was given to her by John.

Prepositions are used in comparisons. For example:  
He is taller than his brother.

She is as smart as her sister.

Prepositions indicate the purpose of an action. For example:  
She went to the store for some groceries. He took the umbrella in case it rained.

Common Mistakes with Prepositions:

1. There are many occasions where you might confuse prepositions. It is difficult to know when you should use (e.g., in/on, at/to). This is because their meanings are very similar, so you have to look at the context of the sentence.
2. Using prepositions unnecessarily.
3. Omitting prepositions when they are required.

Ahmad (2011) attempted the learning problems & analysed the errors in the use of prepositions. The findings of the study showed that the secondary school students

faced difficulties in learning prepositions of time and were confused while using prepositions in their writings.

According to Takako non-native English speaking researchers often find it challenging to use articles & prepositions correctly..., as some languages do not have the direct equivalent of the grammatical categories.

**Idiomatic Usage:** Prepositions often have idiomatic usage, their meaning can't be determined by the individual words alone. For example: "Run out of" meaning to have no more of something. "Look forward to" meaning to anticipate with pleasure.

### Prepositions Versus Conjunctions

According to Quirk et al (1985), sentence & discourse functions of prepositions and complex prepositions as a subclass have much in common those of conjunctions and adverbs. Both prepositions and conjunctions have connecting functions.

The key difference between conjunctions & prepositions is that prepositions are always followed by a noun, noun phrase, or nominalizations, including gerunds, but conjunctions conjoin the main and subordinate clauses, which necessarily have the predicate verb or verb phrase. Thus, if the conjunctions following such words as after or before contain a verb, this sentence unit is a subordinate clause. If no verb can be identified, the word is the preposition in a prepositional phrase.

Prepositions can interact with various parts of speech in a sentence. Here are some examples of how prepositions connect with nouns, adjectives, and verbs:

### Prepositions with Nouns:

1. Noun Phrase as Object: Prepositions often precede noun phrases to show the relationship between the noun and other elements in the sentence.

- She sat on the chair.
- The book is on the table.
- He walked through the park.

2. Noun of Place or Time: Prepositions can also be used with nouns to indicate place or time.

- We'll meet at the café.

- The event is in May.
- They went to the beach.

Prepositions with Adjectives:

Adjective Phrase as Modifier: Prepositions can also connect with adjective phrases to provide additional information or context.

- She's good at playing the piano.
- He's interested in learning French.
- They're excited about the trip.

Phrasal Verbs: Prepositions are part of phrasal verbs, where they combine with verbs to create idiomatic meanings.

- She looked after the children.
- He ran into an old friend.
- They talked about the project.
- He relies on his friends.
- She dreams of becoming a doctor.
- They insisted on the truth.

Understanding how prepositions interact with other parts of speech is essential for constructing grammatically correct and meaningful sentences in English.

**Conclusion:** There are more than 100 prepositions in the English language. In addition, there are endless possibilities for creating prepositional phrases, phrases that begin with a preposition & end with a noun or pronoun. We have to remember that prepositions usually convey concepts such as comparison, direction, place, purpose, source possession, and time.

### Literature:

Ahmad, N. (2011). Error analysis: Learning articles & prepositions among secondary school students...VOL.2, No.12.

Kennedy, D. (1987). Quantification & the use of English, a case study of one aspect of the Learners task. *Applied Linguistics* 8:264-286



Takako Kojima & Helena A. Popiel : Correct Use of Articles & Prepositions in Academic Writing. Copywrite (2023). 10.3346/jkms.2023.38.e417

O'Conner, P. "Prepositional Phrases". Grammarphobia.  
[http://www.grammarphobia.com/blog/2008/11/prepositional\\_phrases.html](http://www.grammarphobia.com/blog/2008/11/prepositional_phrases.html)

## MAKTABGACHA YOSHDAGI BOLALARDA MO‘LJAL OLISH QOBILYATINI SHAKLLANTIRISHNING O‘ZIGA XOS XUSUSIYATLARI

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***Annotatsiya:** Ushbu maqolada maktabgacha yoshdagi bolalarda mo‘ljal olish qobiliyatini shakllantirishning o‘ziga xos xususiyatlari, tevarak-atrofnii chamalash, oriyentirovka qilish, bolaning eslab qolish qobiliyati, xotirasi, diqqat — e’tibori, o‘ylash, esga tushirish, ko‘z oldiga keltira olish kabi qobiliyatlarini shakllantirish xususida so‘z yuritilgan.*

***Kalit so‘zlar:** tevarak-atrof, chamalash, eslab qolish qobiliyati, xotirasi, diqqat, o‘ylash.*

***Аннотация:** В данной статье рассмотрены особенности формирования у детей дошкольного возраста способности находить цель, способности воспринимать окружающее, ориентации, способности к запоминанию, памяти, внимания, мышления, припоминания, а также способности визуализировать предмет. ребенок обсуждается, упоминается.*

***Ключевые слова:** окружающее, восприятие, способность к запоминанию, память, внимание, мышление.*

***Abstract:** In this article, the peculiarities of the formation of the ability to find a target in preschool children, the ability to perceive the surroundings, orientation, the ability to remember, memory, attention, thinking, recall, and the ability to visualize the child are discussed. it is mentioned.*

**Key words:** *surroundings, perception, ability to remember, memory, attention, thinking.*

Tevarak-atrof tushunchasi — keng ma’nodagi, murakkab, serqirra tushunchadir. Biz tevarakatrof haqidagi bilim va malakalarni egallash uchun, shuningdek uning shakli, belgilari haqida, ularning tuzilishi, balandligi, uzunligi, kengligi haqida, predmetlarning joylashuvi, ularning orasidagi masofani aniqlashdagi va belgilay olishni o’rganish uchun, tevarak-atrof haqidagi tushunchalarini yanada mustahkamlash uchun turli tevarak-atrof kategoriyalariga murojaat qilamiz.

Tevarak-atrofnı chamalash, oriyentirovka qilish tushunchasi, masalasi murakkab masaladir. Tevarak-atrofdı mo’ljal olishni maktabgacha yoshdanoq shakllantirib borish zarurdir. Bolalarda mo’ljal olish malakalarini shakllantirish uchun quyidagilarni bolalikdanoq tarbiyalab borish zarur.

a) kishi tevarak — atrofnı yaxshilab kuzatib “O’zi turgan nuqta” haqida ma’lumot bera olish; yon atrofidagi obyektı tushuntira bilishi kerak:

b) o’zi qo’yib ketgan predmet yoki insonni qayta tevarak-atrofnı chamalash orqali topib kelishi yoki aniq ma’lumot bera olishi kerak;

v) bola tevarak — atrofnı obyektlicha tushuntirayotganda, chalkashtirmay, predmetlarning bir xil yoki har xilligini tushuntira olishi, shuningdek qaysi predmet qaynınisining ortida, oldida, orasida, uzoq, yaqinligi, xullas orasidagi masofa haqida to’la ma’lumot bera olishi kerak. Tevarak-atrof haqidagi aniq mo’ljal olishga har bir inson ega bo’lishi kerak. Bu bilimlar esa ularga yoshlikdan beriladi. Inson aktiv harakatini davom ettirishi uchun koordinatsiyani va uni mo’ljal olishni yaxshi bilishi kerak. Ko’pchilik bu usuldan faqat bir joydan ikkinchi bir joyga adashmasdan borib kelishi uchungina foydalanadi.

Mo’ljal olishni aniq belgilay olish, joylarnı yaxshi o’zlashtirish uchun, shu odamning eslab qolish qobiliyati, xotirasi, diqqat — e’tibori, o’ylash, esga tushirish, ko’z oldiga keltira olish kabi qobiliyatlari ancha mustahkam bo’lishi kerak. Aks holda, bu qobiliyatlari zaif odamlar oriyentirovkani yaxshi belgilay olmaydilar. Ba’zi maktabgacha ta’lim yoshidagi bolalar hali tevarak atrofnı kuzatishni, uni oriyentirovka

qilishni yaxshi o'zlashtira olmagan bo'lishlari ham mumkin. Masalan: o'z uylariga borishni bilmaydi. Lekin, aksincha bog'da bolalar bilan u o'ynaladigan o'yinlarning kamchiligi, mashg'ulotlar va boshqa ko'pgina bolalar ijodi tevarak-atrof bilan bog'liq. Tevarak — atrofni anglashda psixofiziologik mexanizmga ham bog'liqdir, u inson ongidagi ko'rish, eshitish, so'zlash, eslab qolish, xotira kabi qobiliyatlar (analizatorlar) yordamida dinamik sistemadek saqlanib qoladi. Ayniqsa bunda harakatlanuvchi analizatorlar va ichki his-tuyg'ularining roli ahamiyatlidir. Tevarak atrofni idrok qilish biror bir mo'ljal asosida foydalana bilishni talab qiladi, bolalik yoshidan boshlab o'zining sezgilari orqali idrok qiladi, ya'ni tanasining tomonlari bilan mo'ljal qiladi. Maktabgacha ta'lim yoshida bola tevarak-atrof tushunchalarini so'zlarda ifodalanishini egallaydi: oldinda-orqada, yuqoriga- pastga, chapga-o'ngra. Yosh bolada tevarak atrofni idrok qilishda bolaning shaxsiy tanasi asosiy markaz bo'lib hisoblanadi va u o'zining tanasiga nisbatan sezgi organlari orqali mo'ljalga oladi. Keyinroq borib unga yana bir sistema qo'shiladi. Bu nutqda ifodalashdir, ya'ni so'zlar bilan. Bu narsa bolalarda tomonlarni o'ziga tegishlilarni sezgi, farqlash, aniqlash xususiyatlarini mustahkamlash natijasida bo'ladi, qaysiki bu tomonlar: yuqoriga, pastga, oldinga, orqaga, o'ngga, chapga. Bola tomonlarining juft, qarama- qarshi tomonlarini guruhini o'zlashtirsa ham, hali u uning aniqligida yanglishadi. Bolalar uchun asosiy qiyinchiliklar o'ng va chapni ajratishdir. Bolalar tevarak-atrofni oriyentirovka qilishga o'rganayotganlardayoq oddiy terminlardan murakkabroqda, tevarak-atrof terminlariga o'ta boshlaydilar. Ularning nutqlaridagi "shu yerda", "u yerda", "mana" kabi so'zlari (biror predmetni ko'rsatib, aytib) "yonida", "yaqinda", "yonma-yon" kabi yangi terminlar bilan, almashinishi buning yaqqol guvohi bo'la oladi. Bola oriyentirovka qilishga o'rganayotganida "yonma-yon" so'zining ma'nosiga keyinroq tushunadi, yoki "o'rtada", "orasida" kabilarni o'rganib bo'lgach, keyinroq "atrofida", "chetida", yoki "yonidan", yana keyinroq borib bola bu so'zlarni atroflicha tushuna boshlaydi va chap tarafdami? Yoki o'ng tarafdami? farqlay boshlaydi. Lekin bolalarga tevarak atrofni oriyentirovka qilishga o'rgatish ishini turli yo'llar va yo'llanmalar bilan tushuntirish kerakligini unutmaslik kerak. Oldinda, orqada, chapda, o'ngda jadallashganligini

aniqlay olish o'rganishi kerak. Fazoviy yo'nalishlarni farq qilishda taqqoslash, aniqlash asos bo'lib xizmat qiladi. O'quv yili boshida bolalar atrof-muhitga munosabati qay darajada ekanligi tekshirib ko'rib bu ko'nikma mustahkamlanadi. O'ng va chap qo'l ni farq qilish mashqlariga katta beriladi, chunki chap hamda o'ng nima ekanini bilish maktab yoshdagi bolalar uchun ancha qiyinlik qiladi: qo'l bilan tomonni, orqa tomonni, yuqorini, pastni, chapni, o'ngni ko'rsatish ko'nikmalari mustahkamlanadi. Narsalarning fazoviy joylashuvini belgilash. Bolalarni turgan joylariga nisbatan, oldinga, orqaga va shu kabi yo'nalishlarni ko'rsatishga o'rgatib bo'lgach, ularga narsalar o'zlarining qaysi tomonlarida turganligini (oldinda, oldi tomonda, orqa tomonda, chapda, o'ngda, yuqorida, pastda) aniqlashni mashq qildirishga o'tish mumkin. Avval bolalarga ularning qarama-qarshi tomonlarida, oldinda—orqada, o'ngda—chapda turgan faqat ikkita o'yinchoq yoki buyumning joylashish o'rnini aniqlash taklif qilinadi. Keyinchalik bu narsalarning soni 4 tanacha ko'paytiriladi. Narsalar oldin boladan unchalik uzoq bo'lmagan masofada (yonida) joylashtiriladi. Asta-sekin bu masofa orttirib boriladi.

Bola narsalarning turgan joyini aniqlab bo'lgandan so'ng unga chap va o'ngga ( $90^\circ$ ), keyin esa orqaga ( $80^\circ$ ) aylanish taklif qilinadi Keyinchalik bu narsa bolalarga narsalar o'zlarining qaysi tomonlarida joylashganini aniqlashda nisbiylik borligini tushunib olish imkonini beradi. Bola chapga burilsa, stol endi uning chap tomonida emas, balki o'ng tomonida bo'ladi. Bolalarning harakatlari va joydan joyga o'tishi bilan bog'liq bo'lgan mashqlar eng samarali mashqlardir. Narsalarning mashqlari mashg'ulotlarda ham, kundalik hayotda ham amalga oshiriladi. „Nima qayerda turibdi, top?“, „Kim ketdi va u qayerda turgan edi?“ kabi didaktik o'yinlar o'tkazishga ahamiyat beriladi. Bolalar asosiy fazoviy yo'nalishlarni farq qilish va aytishni bilib olganlaridan keyin ularni ko'rsatilgan yo'nalish harakat qilishga o'rgatiladi. Buning uchun avval „Qayerga borayapsan?“ o'yinidan foydalanish maqsadga muvofiqdir. Tarbiyachi bolalarga topshiriqni tushuntirib: „Bugun sizlar yashirib qo'yilgan o'yinchoqlarni topishni o'rganasizlar“, — deydi va bir bolani chaqirib: „Oldinga yursang ayiqchani topasan, orqaga yursang qalamni topasan. Sen qayoqqa borishni

istaysan va u yerdan nima topasan?”, — deydi. Bola yo‘nalishni tanlab olishi, uning nomini aytishi va shu yo‘nalishda borishi kerak. U o‘yinchoqni topgach, qaysi o‘yinchoqni va qayerdan topganini aytadi. („Men orqaga yurdim va tokchadan qalamni topdim“.) “Uzoqroq”, „yaqin“, „uzoq“ so‘zlari haqida tasavvur hosil qilish. Bolalar „yaqinroq“, „uzoqroq“, „yaqin“, „uzoq“ so‘zlari haqidagi, tasavvurlarga o‘yinchoqlar va narsalar bilan u yoki bu ishlarni bajarish davomida ega bo‘ladilar. „Kimning koptogi uzoqroqqa yumaladi?, Qani, kim uzoqqa otdi?“ — kabi savollar bolalar e‘tiborini masofaga jalb etadi. Ular yaqinroq, uzoqroq, yaqin, uzoq kabi so‘zlarning ma’nosini astasekin o‘zlashtira boradilar. Qog‘oz varag‘ida va stol yuzasida tasavvur qila bilishga o‘rgatish. O‘rta guruhdagi matematika mashg‘ulotlarida bolalarda qog‘oz varag‘ida va stol yuzasi ustida tasavvur qilishni o‘stirishga katta e‘tibor beriladi. Birinchi mashg‘ulotlardan boshlab ularga sanoq kartochkasining yuqorigi va pastki doskasini topish, ma’lum miqdordagi predmetlarni yuqoriga hamda pastga yoki chap va o‘ngga terib qo‘yish topshiriladi. Stol ustida geometrik figuralarning fazoviy joylanishini aniq belgilashga, joylanishni eslab qayta tiklashga bolalarni o‘rgatish maqsadida maxsus mashg‘ulotlar o‘tkaziladi.

**Foydalangan adabiyotlar:**

1. Djanpeisova G.E., Xodjimuratova B.N. . Matematik tasavurlarini shakllantirish. T.: “Innovatsiya-Ziyo”, 2020.
2. Xasanboyeva.O.U va boshqalar. «Maktabgacha ta’lim pedagogikasi».T., «Ilm ziyo», 2006.
3. Bikbaeva N.U, Ibragimova Z.I , Kosimova X.I, «Maktabgacha tarbiya yoshidagi bolalarda elementar matematik tasavvurlarni shakllantirish» T. «O‘qituvchi» ,1995.
4. O‘zbekiston Respublikasining ilk va maktabgacha yoshdagi bolalar rivojlanishiga qo‘yiladigan davlat talablari. T .: BMT Bolalar jamg‘armasi (YuNISEF), 2018.
5. Ilk qadam” Maktabgacha ta’lim muassasasining Davlat o‘quv dasturi. T.: BMT Bolalar jamg‘armasi (YuNISEF), 2018metodikasi. T.: Tafakkur. 2020.



## ALOPECIA AND PEROXIDATION OF LIPIDS AND ENZYMES OF THE ANTIOXIDANT SYSTEM

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**Abstract:** *this article attempts to reveal the main reasons for assessing the indicators of lipid peroxidation and enzymes of the antioxidant system in patients with alopecia areata (AA). To carry out scientific work, the author conducted a study of the venous blood of 35 patients with focal forms of HA in the progressive stage of the disease (main group; mean age  $34.1 \pm 2.0$  years) and 31 healthy individuals (comparison group; mean age  $30.5 \pm 1,8$  years). The problem in question is still little studied, and therefore requires more thorough research.*

**Keywords:** *lipid peroxidation, alopecia.*

**Introduction:** Alopecia (lit. "baldness" from other Greek ἀλωπεκία through Latin alopecia "baldness, baldness") is a pathological hair loss, leading to their partial or complete disappearance in certain areas of the head or torso. The most common types of alopecia include androgenetic (androgenetic), diffuse or symptomatic (effluviums), focal or nested (areata), scarring (scarring).

Allocate alopecia:

by prevalence

- total or atrichia (loss and absence of hair on the head (including eyebrows and eyelashes) and even on the whole body);
- diffuse or hypotrichia (thinning and thinning of hair throughout the head or body, including: Unn's syndrome, anagen alopecia, telogen alopecia, with asbestos lichen);

- focal or nested (occurrence of foci of complete absence of hair, including: frontal fibrous alopecia, temporal triangular alopecia, ophiasis (alopecia areata); scarring of the hair follicle
- cicatricial (hair does not grow on the skin of scars):
  - primary, for example, with pseudopelade (atrophic circular), Kenko decalving folliculitis, Pusey exfoliating cellulitis (undermining folliculitis and perifolliculitis of the head), central centrifugal cicatricial alopecia, keloid folliculitis (keloid acne);
  - secondary, for example, with post-traumatic scars, scleroderma, mucinous folliculitis, etc.;
- non-scarring, for example: premature (presenile, androgenic) - male pattern baldness of the scalp, associated with blood levels of male sex hormones; traction alopecia (manipulative, samurai disease) - usually caused by wearing certain hairstyles that pull hair together;
- mixed, for example: Piccardi-Lassueur-Graham-Little syndrome - scarring alopecia of the scalp and non-scarring alopecia of the axillary and inguinal regions, observed with lichen planus [de], a type of lichen planus, can be combined with vulvo-vaginal-gingival syndrome and frontal fibrosing alopecia.

In addition, alopecia can accompany some diseases - for example, syphilis, ringworm, trichotillomania, progeria, skin myxedema, Fox-Fordyce disease, Sjögren-Larssen syndrome, radiation sickness, lamellar ichthyosis, etc.

**Aim:** to evaluate the parameters of lipid peroxidation and enzymes of the antioxidant system in patients with alopecia areata (AA).

**Materials and methods:** the material for the study was the venous blood of 35 patients with focal forms of GA in the progressive stage of the disease (main group; mean age  $34.1 \pm 2.0$  years) and 31 healthy individuals (comparison group; mean age  $30.5 \pm 1.0$  years). 8 years). The serum level of malondialdehyde (MDA), the activity of superoxide dismutase (SOD) and catalase in erythrocyte hemolysate were determined. Spectrophotometry was performed on a Genesys 5 instrument (USA). The scores are described using the median and the 25th and 75th quartiles. The

Mann-Whitney test was used to compare the data.

**Results:** in patients with GA, the SOD activity index was 202.04 [197.57; 221.94] arb. units/g, exceeded the same indicator in the comparison group, equal to 112.87 [108.91; 112.75] arb. U/g protein, by 179.0% ( $<0.001$ ). At the same time, the enzymatic activity of catalase in patients with GA was lower than in the comparison group by 35.8%, and, accordingly, amounted to 73.02 [60.28; 86.38] arb. u/g protein and 113.79 [103.86; 118.17] ( $<0.001$ ). This indicates that the rate of hydrogen peroxide synthesis significantly exceeds the rate of its utilization by the enzymatic route. The accumulation in the tissues of this product, which is capable of interacting with metals of variable valence (iron, copper), will lead to the formation of a highly active hydroxyl radical and exacerbate oxidative stress. Evidence of this is the increase in the level of MDA, which is the final metabolite of lipid peroxidation, in the serum of patients with GA. Thus, the median content of MDA in the main group was 1.6 times higher than the level of this metabolite in healthy individuals and amounted to 3.86 [3.14; 7.71]  $\mu\text{mol/ml}$  and 2.36 [1.97; 2.83]  $\mu\text{mol/ml}$  ( $p<0.001$ ).

**Conclusions:** a possible relationship between the pathogenesis of GA and oxidative stress can be explained by the initiation of hydrogen peroxide in the synthesis of the chemokine CXCL16 by keratinocytes, which, along with the skin lymphocytic antigen, provides a homing effect to the skin of CD8+ T cells synthesizing IFN- $\gamma$ . An increase in the intrafollicular level of the latter initiates a key event in the pathogenesis of GA - the loss of the immune privilege of the hair follicle.

## LITERATURE:

1. Islamov N. H., Yusupov M. M., Oripov R. A. CHEKLANGAN SKLERODERMANI DAVOLASHNING SAMARALI //Educational Research in Universal Sciences. – 2023. – T. 2. – №. 14. – C. 324-329.
2. Mardonovich N. R. et al. Epidemiological Analysis of Trichofitia Disease in Samarkand Region //Journal of Survey in Fisheries Sciences. – 2023. – T. 10. – №. 1S. – C. 4981-4994.

3. Anvarovich O. R., Ravshanovich K. K. A New View on the Course of Sexually Transmitted Diseases //Web of Semantic: Universal Journal on Innovative Education. – 2023. – Т. 2. – №. 2. – С. 189-193.
4. Anvarovich O. R., Javlonovna P. A. Takrakor in the Treatment of Itching Dermatitis //Web of Semantic: Universal Journal on Innovative Education. – 2023. – Т. 2. – №. 2. – С. 184-188.
5. Anvarovich O. R. Management of Sick Children with Adopic Dermatitis //Web of Semantic: Universal Journal on Innovative Education. – 2023. – Т. 2. – №. 2. – С. 179-183.
6. Oripov R. A. LABORATORY PARAMETERS IN CHILDREN WITH VERIFIED MENINGITIS //Modern Scientific Research International Scientific Journal. – 2023. – Т. 1. – №. 7. – С. 162-168.
7. Davlyatovna K. G., Anvarovich O. R., Xikmatovich I. N. UROGENITAL XLAMIDIYADA MIRAMISTINNING SAMARADORLIGINI BAHOLASH //Нововведения Современного Научного Развития в Эпоху Глобализации: Проблемы и Решения. – 2023. – Т. 1. – №. 4. – С. 53-59.
8. Kurbonalievich A. S. et al. UROGENITAL CHLAMYDIOSIS IS A CAUSE OF STERILITY AND CHRONIC PROSTATITIS IN MEN //Web of Scholars: Multidimensional Research Journal. – 2022. – Т. 1. – №. 6. – С. 306-310.
9. Anvarovich O. R. et al. ETIOPATHOGENESIS AND CLINICAL COURSE SPECIFIC CHARACTERISTICS OF NEURODERMITIS DISEASE //Web of Scholars: Multidimensional Research Journal. – 2022. – Т. 1. – №. 6. – С. 276-280.
10. Bakhodirovich T. I. et al. COMBINED IMMUNOTHERAPY IN THE TREATMENT OF CANDIDIASIAN INFECTIONS OF THE URINARY ORGANS //Web of Scholars: Multidimensional Research Journal. – 2022. – Т. 1. – №. 6. – С. 257-263.
11. Anvarovich O. R. ATOPIK DERMATIT BILAN BIRGA KECHADIGAN DIABET KASALLIGINI DAVOLASH SAMARADORLIGINI

BAHOLASH //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – С. 242-244.

12. Anvarovich O. R. APPLICATION OF VIFIRON FOR LOCAL TREATMENT OF HERPIS VIRUS //Евразийский журнал медицинских и естественных наук. – 2022. – Т. 2. – №. 3. – С. 30-32.

13. Kurbonalievich A. S. et al. Experience of the Combination of Tiflox and Immunomax in the Treatment of Trichomoniasis Combined with a Bacterial Process //Annals of the Romanian Society for Cell Biology. – 2021. – С. 2376-2380.

14. Kurbonalievich A. S. et al. Some Features of Psoriasis Therapy in Stationary //European Scholar Journal. – 2021. – Т. 2. – №. 3. – С. 248-250.

15. Kurbonalievich A. S. et al. Careful Attention To The History Of Chronic Urticaria Is One Of The Important Factors Of Productive Therapy //The American Journal of Medical Sciences and Pharmaceutical Research. – 2021. – Т. 3. – №. 02. – С. 55-58.

16. Kurbonalievich A. S. et al. Features Of The Use Of Antioxidant Drugs In The Treatment Of Psoriatic Disease //The American Journal of Medical Sciences and Pharmaceutical Research. – 2021. – Т. 3. – №. 02. – С. 50-54.

17. Орипов Р. А. и др. ОСОБЕННОСТИ ПРИМЕНЕНИЕ АНТИОКСИДАНТНЫХ ПРЕПАРАТОВ В ЛЕЧЕНИИ НЕЙРОДЕРМИТА. – 2021.

18. Ахмедов Ш. К. и др. НЕКОТОРЫЕ ОСОБЕННОСТИ ТАКТИКИ ПРОДУКТИВНОГО ЛЕЧЕНИЯ ХРОНИЧЕСКОЙ КРАПИВНИЦЫ. – 2021.

19. Salamova L. A. et al. Cutaneous leishmaniasis and concomitant tissue helminthiasis //ResearchJet Journal of Analysis and Inventions. – 2021. – Т. 2. – №. 03. – С. 64-72.

20. Ачилова О. Д. и др. Эхинококкоз касаллигини иммуноташхислашда антигенларни кўллашнинг тамоиллари //Общество и инновации. – 2020. – Т. 1. – №. 1/s. – С. 598-603.

21. Tolibov M. M., qizi Buronova F. Z. MAHALLIY OZON TERAPIYASINI QO 'LLAGAN HOLDA KOMPLEKS DAVOLASH FONIDA YOSH ERKAKLARDA SURUNKALI URETROGEN PROSTATIT (CUP) KECHISHINI O 'RGANISH //Educational Research in Universal Sciences. – 2024. – T. 3. – №. 1. – C. 417-421.

22. Tolibov M. M., Shodmonova M. A. BOLALARDA ATOPIK DERMATIT (AD) PATOGENEZIDA GENETIK OMILLARNING ROLINI BAHOLASH VA IMMUNOLOGIK PARAMETRLARGA QARAB ANIQLANGAN POLIMORFIZMLARNING PROGNOZIK AHAMIYATINI ANIQLASH //Educational Research in Universal Sciences. – 2024. – T. 3. – №. 1. – C. 406-410.

23. Tolibov M. M. et al. ATOPIK DERMATITNI DAVOLASHDA LAZER TERAPIYASINING SAMARADORLIGI //Educational Research in Universal Sciences. – 2024. – T. 3. – №. 1. – C. 286-289.

24. Utayev A. J., Tolibov M. M., Axmedova M. M. MANAGEMENT APPROACHES FOR CHRONIC URETHROGENIC PROSTATITIS //Modern Scientific Research International Scientific Journal. – 2024. – T. 2. – №. 1. – C. 151-156.

25. Makhmudovich T. M. ATOPIC DERMATITIS INCIDENT LEVEL, DIAGNOSTIC CRITERIA AND PROGNOSTIC IMPORTANCE //JOURNAL OF APPLIED MEDICAL SCIENCES. – 2023. – T. 6. – №. 4. – C. 158-168.

26. Толибов М. М. СОВРЕМЕННОЕ СОСТОЯНИЕ ПРОБЛЕМ ЭПИДЕМИОЛОГИИ, МИКРОБИОЛОГИИ И ТЕРАПИИ АКНЕ (ОБЗОР ЛИТЕРАТУРЫ) //SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM. – 2023. – T. 2. – №. 14. – C. 215-224.

27. Иляевна P. U. et al. DERMATOSCOPIC PAINTING SOME COMMON DERMATOSES //World scientific research journal. – 2023. – T. 16. – №. 2. – C. 107-120.

## USE OF DERMATOSCOPIC METHOD FOR DIFFERENTIAL DIAGNOSIS OF FUNGAL DISEASES AND ALOPECIA IN ADOLESCENTS

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***Annotation:** This article attempts to reveal the main reasons for the diagnostic effectiveness of the dermatoscopic method for the differential diagnosis of mycosis of the scalp and alopecia areata in children.*

*To carry out scientific work, the author conducted a survey of 78 children who complained of foci of hair loss on the scalp. Age of children from 8 months to 18 years*

***Key words:** alopecia, mycosis, children.*

**Introduction:** Mycoses are infectious diseases caused by parasitic fungi. Pathogenic fungi are widely distributed in the environment (they are present on plants, clothes, household items, in soil). The direct route of infection transmission occurs through contact with a sick person, indirect - through contact with various things and objects used by patients. In rare cases, a street or domestic animal, most often a cat, can become a source of infection. In common parlance, such a disease is called "deprive". Fungal spores can get on our skin and subcutaneous tissue in various ways - through the mucous membrane of the eyes or mouth, upper respiratory tract, through various microtraumas, wounds, cracks, diaper rash, sores. According to expert estimates, 15-30% of the world's population suffer from fungal diseases. One of the factors provoking the development of mycosis is immunodeficiency - a decrease in the body's defenses. Mycoses can affect various parts of the skin (feet, legs, hands, arms, head, torso) and its appendages (hair, nails),



external genitalia, mucous membranes, lungs, esophagus. The duration of the incubation period depends on the type of pathogen, its virulence and localization of the process. The disease can acquire a chronic course with periods of exacerbation. Local fungal infections typically affect the skin and its appendages, the oral cavity causing stomatitis, and/or the vagina causing candidiasis vaginitis. Systemic fungal infections can affect the skin and internal organs.

**Aim:** to evaluate the diagnostic efficiency of the dermatoscopic method for the differential diagnosis of mycosis of the scalp and alopecia areata in children.

**Materials and methods:** 78 children were examined who complained of foci of hair loss on the scalp. Age of children from 8 months to 18 years. Microsporia of the scalp was diagnosed in 28 patients (15 boys and 13 girls), trichophytosis of the scalp - in 25 children (20 boys and 5 girls), alopecia areata - in 25 patients (13 girls, 12 boys). Fig.1. The diagnosis of mycosis of the scalp and alopecia areata was established on the basis of the clinical picture, fluorescent diagnostic data, laboratory methods (KOH-test of skin scales and hair), and the cultural method. A dermatoscopic examination of a hair lesion on the scalp was performed using a Heine Delta 20 dermatoscope.

**Results:** in 49 (93%) children with mycosis, one or more of the following dermoscopic patterns were observed: "comma-shaped hair" was found in 30 (57%) children, "zigzag hair" in 31 (59%) children ( $p < 0.05$ ). In addition, hair lesions in microsporia were characterized by horizontal white stripes in the structure of the hair shaft, identified in 17 children (60.7%), with trichophytosis - "corkscrew-shaped hair", identified in 8 (32%) children ( $p < 0.05$ ). In 24 (96%) children with alopecia areata, one or more of the following dermoscopic patterns "yellow dots" were observed: in 22 children (88%), "black dots (cadaverized hair)" in 9 (36%), "exclamation point hair" sign" - in 12 (48%), "miniaturized hair, devoid of pigment (vellus)" - in 19 (76%). In children with mycosis, there were no signs characteristic of alopecia areata ( $p < 0.05$ ). Figure 2.

**Conclusions:** dermatoscopic patterns characteristic of mycosis of the scalp and alopecia areata in children have been established, which makes it possible to use dermatoscopic examination as a tool for non-invasive express diagnostics in the practice of a dermatovenereologist.

**Figure -1 Distribution of patients due to the occurrence of hair loss**

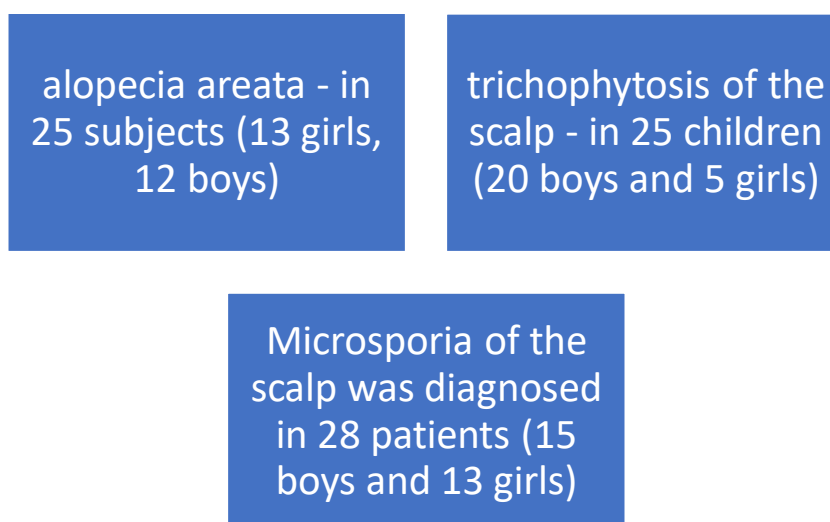
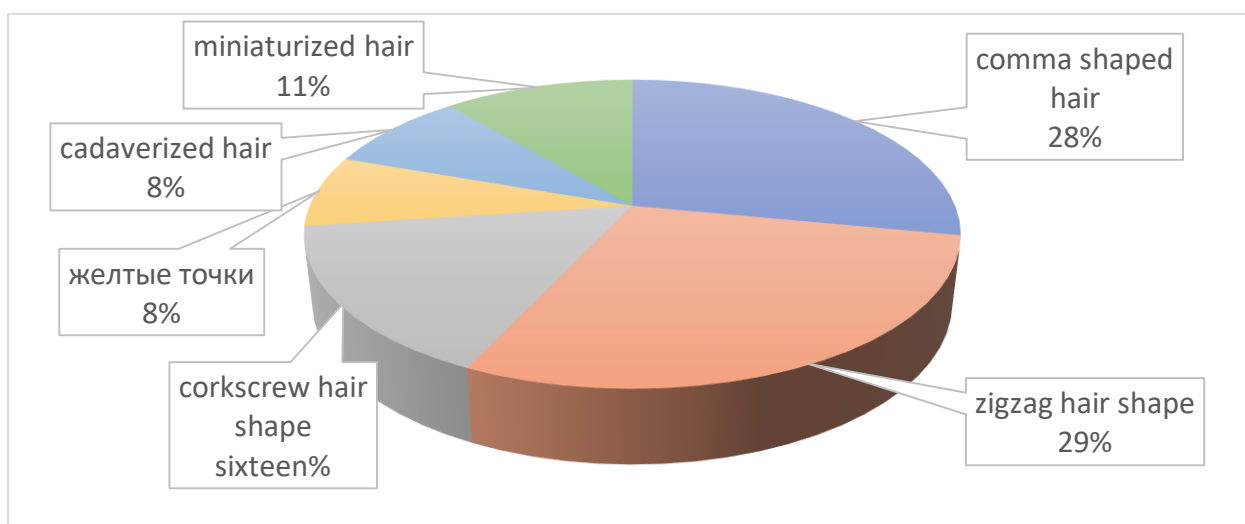


Figure -1 Distribution of patients according to the type of pathological hair in this pathology.



### Literature:

1. Тошев С. У., Сулаймонов А. Л., Тиллакобилов И. Б. ТЕРАПИЯ ВИТИЛИГО С ПРИМЕНЕНИЕМ ПОЛИОКСИДОНИЯ В СОЧЕТАНИИ С ЛЮКОДЕРМИНОМ //Высшая школа: научные исследования. – 2019. – С. 55-59.

2. Тошев С. У., Аширов З. Ф., Абдуллаев Х. Д. ЛЕЧЕНИЕ ВИТИЛИГО 308-НМ ЭКСИМЕРНЫМ ЛАЗЕРОМ //Актуальные аспекты медицинской деятельности. – 2021. – С. 240-243.
3. Salamova L. A. et al. Evaluation of the effectiveness of the drug gepon in the treatment of genital candylomas. – 2021.
4. Davlatovich A. X. VAGINAL TRIXOMONADLAR SHTAMMASINI TRIXOPOLGA VA XIMOTRIPSIN BILAN BILAN SEZGICHLIGINI ANIQLASH //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – С. 645-647.
5. Davlatovich A. X., Orifovich S. D., Baxtiyorovich A. S. Studying the Relationship of Local Immune Status and the Course of Burn Disease //Central Asian Journal of Medical and Natural Science. – 2022. – Т. 3. – №. 5. – С. 679-682.
6. Xolmurodovich D. J., Umidovich N. T., Davlatovich A. X. CLINIC COURSE OF NONSPECIFIC PNEUMONIA //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – С. 510-513.
7. Абдуллаев Х. Д. и др. ЛАЗЕР В ЛЕЧЕНИИ ВИТИЛИГО //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – С. 495-500.
8. Hikmatovich I. N. et al. The use of Fungite in the Local Treatment of Genital Herpes //International Journal of Innovative Analyses and Emerging Technology. – 2021. – Т. 1. – №. 5. – С. 231-232.
9. Davlatovich A. X., O'gli A. B. X., O'gli I. A. S. BOLALARDA GENITAL GERPESNI DAVOLASH SAMARADORLIGINI BAHOLASH //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – С. 367-369.
10. Xolmurodovich D. J., Orifovich R. S., Davlatovich A. X. FEATURES OF THE MICROELEMENT STATUS FOR THE DEVELOPMENT OF ATOPIC DERMATITIS IN CHILDREN //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – С. 447-450.

11. Davlatovich A. X. DETERMINATION OF GENE ACTIVITY IN VITILIGO PATIENTS //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – С. 451-454.
12. Davlatovich A. X. et al. EVALUATION OF THE GENERAL SOMATIC STATUS OF PATIENTS WITH VITILIGO BASED ON THE DETERMINATION OF THE CONTENT OF NATURAL ANTIBODIES TO VARIOUS ORGANIS AND TISSUES OF THE BODY //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – С. 472-476.
13. Davlatovich A. X. et al. USING IMMUNOMAX AND 0.1% TACROLIMUS OINTMENT IN THE TREATMENT OF VITILIGO //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – С. 559-562.
14. Абдуллаев Х., Толибов М. Allergodermatozlar bilan bog‘liq bo‘lgan vulgar acneni kompleks davolash Samaraligini o‘rganish //Журнал гепатогастроэнтерологических исследований. – 2021. – Т. 2. – №. 3.2. – С. 73-74.
15. Ахмедов Ш. К. и др. ЭФФЕКТИВНОСТЬ ЛЕЧЕНИЯ ИЗОТРЕТИНОИНА ПРИ ЛЕЧЕНИИ УГРЕВОЙ БОЛЕЗНИ //Академический журнал Западной Сибири. – 2015. – Т. 11. – №. 1. – С. 56-56.
16. Нуруллаева А. А., Рахматова А. Х., Абдуллаев Х. Д. ЗНАЧЕНИЕ МИКРОБНОГО ОБСЕМЕНЕНИЯ КОЖИ ПРИ НЕКОТОРЫХ ЗУДЯЩИХ ДЕРМАТОЗАХ //Молодежь и медицинская наука в XXI веке. – 2019. – С. 125-125.
17. Абдуллаев Х. Д., Собиров М. С., Жумаева Д. Х. НЕРВНО-ПСИХИЧЕСКИЙ СТАТУС У БОЛЬНЫХ СЕБОРЕЕЙ //Молодежь и медицинская наука в XXI веке. – 2018. – С. 115-116.
18. Iskandarovna K. M. SIFILISNING IMMUNOASSAY SHAKLLARI //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – С. 534-536.

19. Iskandarovna K. M., Dilshodovna A. D., Adxamovna A. A. Impact of Socio-Hygienic Conditions of Life on the Health of Students //Central Asian Journal of Medical and Natural Science. – 2022. – Т. 3. – №. 5. – С. 644-646.
20. Iskandarovna K. M. et al. Comprehensive Assessment of the Levels of Somatic Health and Disturbances of Adaptation Reserves in Medical Students //Central Asian Journal of Medical and Natural Science. – 2022. – Т. 3. – №. 5. – С. 641-643.
21. Iskandarovna K. M., Alamovich K. A., Rabbimovich N. A. Treatment of Urethrogenic Prostatitis Associated with Chlamydia Infection //TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIY JURNALI. – 2021. – Т. 1. – №. 5. – С. 44-46.
22. Iskandarovna K. M., Buribaevna I. S., Azamovna A. N. Immunoassay Forms of Syphilis //TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIY JURNALI. – 2021. – Т. 1. – №. 5. – С. 47-49.
23. Ахмедова М. М., Абдуллаев Х. Д., Камолова М. И. ОЦЕНКА ЭФФЕКТИВНОСТИ МЕТОДОВ ЛЕЧЕНИЯ ОНИХОМИКОЗОВ У ВЗРОСЛЫХ //BARQARORLIK VA YETAKSHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – Т. 2. – №. 3. – С. 186-190.
24. Абдуллаев Д. М., Абдуллаев Х. Д., Камолова М. И. ОПЫТ ПРИМЕНЕНИЯ КРЕМАТЕРБИЗИЛ ПРИ ЛЕЧЕНИИ МИКОЗОВ //BARQARORLIK VA YETAKSHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – Т. 2. – №. 3. – С. 181-185.
25. Teshaboeva K., Israilova S., Qurbonov A. PREVENTION MEASURES FOR MAJOR NON-EPIDEMIC DISEASES //МОЛОДОЙ ИССЛЕДОВАТЕЛЬ: ВЫЗОВЫ И ПЕРСПЕКТИВЫ. – 2021. – С. 97-99.
26. Tolibov M. M., qizi Buronova F. Z. MAHALLIY OZON TERAPIYASINI QO 'LLAGAN HOLDA KOMPLEKS DAVOLASH FONIDA YOSH ERKAKLARDA SURUNKALI URETROGEN PROSTATIT (CUP) KECHISHINI O 'RGANISH //Educational Research in Universal Sciences. – 2024. – Т. 3. – №. 1. – С. 417-421.

27. Tolibov M. M., Shodmonova M. A. BOLALARDA ATOPIK DERMATIT (AD) PATOGENEZIDA GENETIK OMILLARNING ROLINI BAHOLASH VA IMMUNOLOGIK PARAMETRLARGA QARAB ANIQLANGAN POLIMORFIZMLARNING PROGNOSTIK AHAMIYATINI ANIQLASH //Educational Research in Universal Sciences. – 2024. – T. 3. – №. 1. – С. 406-410.

28. Tolibov M. M. et al. ATOPIK DERMATITNI DAVOLASHDA LAZER TERAPIYASINING SAMARADORLIGI //Educational Research in Universal Sciences. – 2024. – T. 3. – №. 1. – С. 286-289.

29. Utayev A. J., Tolibov M. M., Axmedova M. M. MANAGEMENT APPROACHES FOR CHRONIC URETHROGENIC PROSTATITIS //Modern Scientific Research International Scientific Journal. – 2024. – T. 2. – №. 1. – С. 151-156.

30. Makhmudovich T. M. ATOPIC DERMATITIS INCIDENT LEVEL, DIAGNOSTIC CRITERIA AND PROGNOSTIC IMPORTANCE //JOURNAL OF APPLIED MEDICAL SCIENCES. – 2023. – T. 6. – №. 4. – С. 158-168.

31. Толибов М. М. СОВРЕМЕННОЕ СОСТОЯНИЕ ПРОБЛЕМ ЭПИДЕМИОЛОГИИ, МИКРОБИОЛОГИИ И ТЕРАПИИ АКНЕ (ОБЗОР ЛИТЕРАТУРЫ) //SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM. – 2023. – Т. 2. – №. 14. – С. 215-224.

32. Пляевна P. U. et al. DERMATOSCOPIC PAINTING SOME COMMON DERMATOSES //World scientific research journal. – 2023. – Т. 16. – №. 2. – С. 107-120.

33. Пляевна P. U. et al. MODERN TRENDS IN TREATMENT SICK MICROSPORIA //World scientific research journal. – 2023. – Т. 16. – №. 2. – С. 98-106.

## PREVENTIVE MEASURES FOR A HEALTHY LIFESTYLE AMONG YOUNG PEOPLE IMPROVING THE EFFECTIVENESS

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***Annotation:** Let's delve into this vital topic of improving the effectiveness of preventive measures for a healthy lifestyle among young people. This encompasses a range of critical areas, including education, access to resources, behavioral interventions, and community engagement. Here in this in-depth article, we will explore the multifaceted dimensions that contribute to a healthy lifestyle, aiming to provide a comprehensive understanding of the challenges and opportunities in promoting wellness among the youth.*

### **The Need for Comprehensive Preventive Measures**

Promoting a healthy lifestyle among the youth requires a multifaceted approach that involves several interconnected components:

1. Education and Awareness: Equipping young people with comprehensive knowledge about nutrition, physical activity, mental health, and the adverse effects of substance abuse is essential. Comprehensive health education fosters informed decision-making, nurturing a generation of individuals capable of making positive choices for their well-being.

2. Access to Resources: Ensuring access to nutritious food, safe spaces for physical activities, mental health support services, and substance abuse prevention



programs is crucial. Equitable access to resources empowers young people to proactively engage in behaviors that contribute to a healthy lifestyle.

3. Behavioral Interventions: Implementing targeted behavioral interventions that inspire and incentivize healthy choices can be instrumental. From peer-based programs to using incentives for adopting healthy habits, behavioral interventions play a pivotal role in fostering long-term wellness among young individuals.

4. Community Engagement: Engaging communities, including schools, families, local authorities, and healthcare providers, bolsters the support systems for young people. By creating an environment that champions health and wellness, communities can significantly influence the lifestyle choices of young individuals.

### **Education and Awareness**

Central to fostering a healthy lifestyle among young people is the provision of robust health education and promoting awareness of the benefits of adopting healthy behaviors.

Nutrition and Physical Activity Programs: Implementing nutrition and physical activity programs in educational settings and community venues promotes the importance of maintaining a balanced diet and regular exercise. These programs are pivotal in instilling healthy habits early on and reinforcing positive lifestyle choices.

Cultivating a comprehensive educational framework and fostering heightened awareness about healthy behaviors and lifestyle choices is essential for empowering young individuals to make informed decisions about their well-being.

### **Access to Resources**

Equitable access to resources is pivotal to empowering young people and fostering a healthy lifestyle. This spans access to nutritious food, safe spaces for physical activities, mental health support services, and substance abuse prevention programs.

Safe Physical Activity Spaces: Creating safe and accessible spaces for physical activities, including parks, recreational facilities, and pedestrian-friendly neighborhoods, plays a key role in encouraging regular exercise and sports participation among young individuals.

Addressing Mental Health Stigma: Confronting mental health stigma through education, advocacy, and open dialogues about mental wellness, seeking support, and nurturing resilience is pivotal in creating a supportive environment for mental health among young individuals.

### **Behavioral Interventions**

Behavioral interventions play a pivotal role in encouraging young people to adopt and sustain healthy habits, influencing their lifestyle choices through positive reinforcement and tailored interventions.

Peer-Based Programs: Leveraging the influence of peers to promote healthy behaviors creates a supportive environment for young individuals. Peer support programs, peer mentoring, and peer-led health education initiatives are effective in fostering a culture of health and wellness.

Mental Health Peer Support: Facilitating mental health peer support programs and creating safe spaces for young individuals to share their experiences, seek support, and engage in activities that promote emotional well-being helps in creating a supportive network for mental health.

Healthy Lifestyle Coaching: Providing access to healthy lifestyle coaching services, whether through schools, community centers, or healthcare facilities, supports young individuals in setting wellness goals, adopting healthy habits, and finding the necessary support to maintain their efforts.

Promoting Positive Body Image: Offering programs that promote positive body image, self-esteem, and overall well-being, addressing societal pressures and promoting self-acceptance, and encouraging healthy relationships with food and exercise are essential in fostering a holistic approach to wellness.

### **Challenges and Opportunities**

Promoting a healthy lifestyle among young people is not without its challenges. Navigating barriers, addressing disparities, and confronting societal influences are integral to fostering long-term wellness.

**Addressing Socioeconomic Disparities:** Addressing socioeconomic disparities is essential in ensuring that all young individuals, regardless of their background, have equal opportunities to adopt and maintain healthy lifestyles.

**Confronting Societal Influences:** Confronting societal influences, including media portrayal of unhealthy behaviors, peer pressure, and cultural norms, is pivotal in shaping an environment that promotes healthy choices among young people.

**Leveraging Technology for Health Promotion:** Harnessing technology, including mobile health applications, wearable fitness devices, and digital health education platforms, presents an opportunity to reach and engage young individuals with innovative, tailored health promotion interventions.

Confronting the complexities of promoting a healthy lifestyle among young people involves navigating challenges while leveraging opportunities to drive meaningful change.

**Enhancing Cultural Competence:** Embracing cultural competence in health promotion efforts, honoring diversity, integrating cultural traditions into wellness programs, and respecting diverse perspectives about health and well-being are pivotal in creating inclusive environments that resonate with young individuals from diverse backgrounds.

## **Conclusion**

In conclusion, fostering a healthy lifestyle among young people demands a comprehensive, multi-pronged approach that encompasses education, access to resources, behavioral interventions, and community engagement. By equipping young individuals with the knowledge, resources, and support necessary to make informed, healthy choices, we can foster a generation of individuals who are poised to lead healthy, fulfilling lives.

Collaboration among healthcare professionals, educators, community leaders, policymakers, and families is pivotal in championing the cause of youth wellness. By working together to address challenges, confront disparities, and seize opportunities, we can build a nurturing environment that empowers young people to embrace and

sustain a healthy lifestyle, shaping a future characterized by vitality, resilience, and well-being.

### References.

1. Abdugapparovna M. S., Abdurazzaqovich K. A. THE NEED TO ENSURE ECONOMIC SECURITY IN THE HEALTH SECTOR //Web of Medicine: Journal of Medicine, Practice and Nursing. – 2024. – Т. 2. – №. 1. – С. 75-78.
2. Gapparova G. N., Abdugapparovna M. S. BOLALARDA URIKOZURIK NEFROPATIYANI KLINIKO-LABORATOR DIAGNOSTIKASI //Лучшие интеллектуальные исследования. – 2023. – Т. 5. – №. 1. – С. 13-19.
3. Abdugapparovna M. S., Buribaevna I. S. TA'LIM-TARBIYA SOHASIGA YANGICHA YONDASHUV—BARQAROR TARAQQIYOT GAROVI //Лучшие интеллектуальные исследования. – 2023. – Т. 5. – №. 1. – С. 3-8.
4. Rasulova M. et al. Investigation of the strength of thread connections of parts of workwear made of fabric of new structures //AIP Conference Proceedings. – AIP Publishing, 2023. – Т. 2789. – №. 1.
5. Shohista M., Abdukhaliq K. TIBBIYOT OLIY O'QUV YURTLARIDA TAHSIL OLUVCHI TALABALARNI SOG'LIKNI SAQLASH IQTISODIYOTI FANINI O'RGANISH ZARURIYATI //Involta Scientific Journal. – 2023. – Т. 2. – №. 4. – С. 6-11.
6. Abdugapparovna M. S., Alamovich K. A. Mechanisms for Increasing the Economic and Organizational Efficiency of the Management of the Medical Service Sector //Texas Journal of Medical Science. – 2023. – Т. 18. – С. 150-153.
7. Мамасолиева Ш., Хегай Р. О. ПОВЫШЕНИЯ МЕХАНИЗМОВ ЭКОНОМИЧЕСКОЙ И ОРГАНИЗАЦИОННОЙ ЭФФЕКТИВНОСТИ УПРАВЛЕНИЯ СФЕРОЙ ЗДРАВООХРАНЕНИЯ //Involta Scientific Journal. – 2023. – Т. 2. – №. 3. – С. 37-43.

8. Шеховцов С. и др. СРАВНИТЕЛЬНЫЙ АНАЛИЗ РАННИХ ПОСЛЕОПЕРАЦИОННЫХ ОСЛОЖНЕНИЙ У БОЛЬНЫХ С КОРОТКИМИ И СЛОЖНЫМИ ПРЯМОКИШЕЧНЫМИ СВИЦАМИ, ПЕРЕНЕСШИХ РАЗЛИЧНЫЕ МЕТОДИКИ ТЕХНОЛОГИИ ЛАЗЕРНОЙ ОБЛИТЕРАЦИИ СВИЦЕЙ FiLAC //Биология. – 2023. – №. 4. – С. 146.

9. Alimdjanovich R. J., Avazovna Y. S., Abdugapparovna M. S. ФОРМИРОВАНИЯ И УЛУЧШЕНИЯ ЗДОРОВОГО ОБРАЗА ЖИЗНИ У СТУДЕНТОВ ВЫСШИХ УЧЕБНЫХ ЗАВЕДЕНИЙ //JOURNAL OF BIOMEDICINE AND PRACTICE. – 2022. – Т. 7. – №. 3.

10. Avazovna Y. S., Abdugapparovna M. S. SOG ‘LOM TURMUSH TARZINI OLIY TA’LIM MUASSASASI TALABALARI O ‘RTASIDA SHAKLLANTIRISHNING O ‘ZIGA XOS XUSUSIYATLARI O ‘RGANISH //JOURNAL OF BIOMEDICINE AND PRACTICE. – 2022. – Т. 7. – №. 3.

11. Ma’mura X., Sanjar K., Shoxista M. YUQUMLI KASALLIKLARGA CHALINGAN BEMORLARGA IXTISOSLASHTIRILGAN HAMSHIRALIK YORDAMINI TASHKIL ETISH AHAMIYATI VA UNING XUSUSIYATLARI //Involta Scientific Journal. – 2022. – Т. 1. – №. 5. – С. 233-240.

12. Ганиева З., Мамасолиева Ш. Maktabgacha ta’lim muassasalarida hamshiralik ishini tashkil etish va takomillashtirishda hamshira bo‘lishining afzal tomonlari //Общество и инновации. – 2022. – Т. 3. – №. 2/S. – С. 400-406.

13. Ганиева З., Мамасолиева Ш. Преимущества профессии медсестры в организации и совершенствовании сестринского дела в дошкольном образовании //Общество и инновации. – 2022. – Т. 3. – №. 2. – С. 400-406.

14. Мамасолиева Ш. АҲОЛИГА КЎРСАТИЛАЁТГАН ТИББИЙ ХИЗМАТЛАРНИНГ ИЖТИМОИЙ-ИҚТИСОДИЙ МЕХАНИЗМИ ТАШКИЛИЙ ЖИҲАТЛАРИ //Involta Scientific Journal. – 2022. – Т. 1. – №. 4. – С. 419-428.

15. Ризаев Ж. А. Шахноза Авазовна ЮЛДОШЕВА, and Шохиста Абдугаппаровна МАМАСОЛИЕВА." //ФОРМИРОВАНИЯ И УЛУЧШЕНИЯ

ЗДОРОВОГО ОБРАЗА ЖИЗНИ У СТУДЕНТОВ ВЫСШИХ УЧЕБНЫХ ЗАВЕДЕНИЙ." ЖУРНАЛ БИОМЕДИЦИНЫ И ПРАКТИКИ. – 2022. – Т. 7.

16. Jasur R., Shakhnoza Y., Shoxista M. Forming and improving a healthy lifestyle among students of higher educational institutions //Journal of Biomedicine and Practice. – 2022. – Т. 7. – №. 3. – С. 181-189.

17. ЮЛДОШЕВА Ш. А., МАМАСОЛИЕВА Ш. А. SOG 'LOM TURMUSH TARZINI OLIY TA'LIM MUASSASASI TALABALARI O 'RTASIDA SHAKLLANTIRISHNING O 'ZIGA XOS XUSUSIYATLARI O 'RGANISH //ЖУРНАЛ БИОМЕДИЦИНЫ И ПРАКТИКИ. – 2022. – Т. 7.

18. Alimdjanovich R. J., Avazovna Y. S., Abdugapparovna M. S. ФОРМИРОВАНИЯ И УЛУЧШЕНИЯ ЗДОРОВОГО ОБРАЗА ЖИЗНИ У СТУДЕНТОВ ВЫСШИХ УЧЕБНЫХ ЗАВЕДЕНИЙ //JOURNAL OF BIOMEDICINE AND PRACTICE. – 2022. – Т. 7. – №. 3.

19. Mamasolieva S. A., Karimov A. A. SCIENTIFIC ASPECS OF FORMATION OF THE SOCIO-ECONOMIC MECHANISM OF MEDICAL SERVICES //Oriental renaissance: Innovative, educational, natural and social sciences. – 2022. – Т. 2. – №. 3. – С. 484-490.

20. Аскарова Н., Мамасолиева Ш., Гаррарова Г. Клиническая характеристика психо-неврологического состояния часто болеющих детей дошкольного возраста //Общество и инновации. – 2020. – Т. 1. – №. 2/S. – С. 378-385.

21. Tolibov M. M., qizi Buronova F. Z. MAHALLIY OZON TERAPIYASINI QO 'LLAGAN HOLDA KOMPLEKS DAVOLASH FONIDA YOSH ERKAKLARDA SURUNKALI URETROGEN PROSTATIT (CUP) KECHISHINI O 'RGANISH //Educational Research in Universal Sciences. – 2024. – Т. 3. – №. 1. – С. 417-421.

22. Tolibov M. M., Shodmonova M. A. BOLALARDA ATOPIK DERMATIT (AD) PATOGENEZIDA GENETIK OMILLARNING ROLINI BAHOLASH VA IMMUNOLOGIK PARAMETRLARGA QARAB ANIQLANGAN

POLIMORFIZMLARNING PROGNOSTIK AHAMIYATINI ANIQLASH  
//Educational Research in Universal Sciences. – 2024. – T. 3. – №. 1. – C. 406-410.

23. Tolibov M. M. et al. ATOPIK DERMATITNI DAVOLASHDA LAZER TERAPIYASINING SAMARADORLIGI //Educational Research in Universal Sciences. – 2024. – T. 3. – №. 1. – C. 286-289.

24. Utayev A. J., Tolibov M. M., Axmedova M. M. MANAGEMENT APPROACHES FOR CHRONIC URETHROGENIC PROSTATITIS //Modern Scientific Research International Scientific Journal. – 2024. – T. 2. – №. 1. – C. 151-156.

25. Makhmudovich T. M. ATOPIC DERMATITIS INCIDENT LEVEL, DIAGNOSTIC CRITERIA AND PROGNOSTIC IMPORTANCE //JOURNAL OF APPLIED MEDICAL SCIENCES. – 2023. – T. 6. – №. 4. – C. 158-168.



## RIVOJLANGAN MAMLAKATLARNING JAXON TAJRIBALARI VA ULARNING TAXLILI TURIZM SOHASINI RIVOJLANTIRISHDA

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***Annatotsiya:** Turizmning rivojlanishi mamlakat iqtisodiy-ijtimoiy hayotida muhim ahamiyat kasb etmoqda. U iqtisodiyotni rivojlantirish bilan birga mamlakat aholining bandligini ta'minlash, shu orqali turmush darajasini yaxshilash, xorijiy turistlarni jalb qilish, davlatimizni dunyoga tanitish, qadimiy shaharlarimiz va tarixiy yodgorliklarimizni asrab avaylash kabi xayrli ishlarga salmoqli hissa qo‘shish imkoniyatini kengaytiradi. Maqolada rivojlangan mamlakatlar turizm soxasining tajribasi tahlili hamda bugungi kunda O‘zbekistonda turizm sohasining asosiy omillari, uni rivojlantirishning hududiy o‘ziga xosligi, mahalliy aholini atrof - muhitni muhofaza qilishi, bu borada ayrim muammolarni bartaraf etish chora-tadbirlari bo‘yicha takliflar berilgan.*

***Калитли сузлар:** туризм, туризм индустрияси, туризм инфратузилмаси, туризм модели, ривожланган мамлакатлар туризм тажрибаси, туристик хизмат бозори, маънавий озуқа, таассуротлар, туризмнинг жозибadorлиги*

**Ilmiy tadqiqotning maqsadi:** Jahon iqtisodiyotida daromad olish manbalari sifatida tarmoqlararo turizm soxasi eng yaxshi istiqbolli uchta sohalarda mustahkam o‘rinni egallaydi. Rivojlangan xorijiy davlatlar tajribasini o‘rganish va

amaliy ravishda ularga moslashish kelajakda O'zbekistonning boshqa gigant turizm industriyalari bilan bir qatorda o'rin egallashiga ko'mak beradi.

**Tadqiqot usullari va materiallar:** Rivojlangan davlatlarning umumiy ijtmioiy – iqtisodiy doirada turizm sohasini ahamiyatini tushunish va iqtisodiyotda uning multiplikativ ta'siri qo'llami xaqida xabardorlik g'arbiy davlatlarni turizm soxasini iqtisodiyotning ustunroq tarmoqlardan biri sifatida hamda turizm sanoatini rivojlantirishni uzoq muddatli istiqbollarni belgilashni ko'rib chiqish lozimligiga olib keldi. XIX asr oxirlari va XX asr boshlarida turli mamlakatlar tomonidan turizmni tartibga solish sohasida amalga oshirilayotgan siyosat va o'tkazilgan chora - tadbirlarni tahlil qilinganda rivojlangan turizm industriyasi barcha mamlakatlar uchun keng tarqalganligini qayd etish qo'yidagichadir:

- turizmning umuman mamlakat iqtisodiyotiga ta'siri va aloxida mintaqalarning iqtisodiy rivojlanini uchun muxim va keng tarqalgan ta'sirini aniqlash;
- sayyohlar uchun turizmni rag'batlantirish, sayyohlar kelishini tenglashtirish va shunga muvofiq infratuzilmaga - aeroportlar, havo yo'llari, quruqlik transporti va turar-joylarga bosim o'tkazish;
- har xil turdagi ekstremistlarning tez-tez harakatlari bilan bog'liq holda sayyohlar xavfsizligini ta'minlash boyicha talablarni kuchaytirish;
- o'z turistik mahsulotlarining raqobatbardoshligini oshirish, turistik resurslardan foydalanishning qulayligi va samaradorligini oshirish vositasi sifatida yangi texnologiyalardan foydalanish va ulardan foydalanish;
- turizmni rivojlantirish tadbirlari va ekologiya, madaniy va tarixiy merosni himoya qilish bo'yicha chora - tadbirlar bilan yaqin aloqada bo'lish;

Bugungi kunda turistik sektorni davlat boshqaruvining uchta asosiy modeli mavjud [1]. Birinchi model mamlakatda turizmni davlat tomonidan tartibga solish uchun markaziy hokimiyat yo'qligini taxmin qiladi. Ushbu modelning asosiy sharti shundaki, mamlakat chet ellik sayyohlar uchun jozibador bo'lishi kerak va uning turistik mahsulotini jahon bozorida maxsus reklama qilishga muhtoj emas. Shu bilan birga rivojlangan infratuzilma, bank xizmatlari, sug'urta xizmatlari va tibbiy

xizmatlarning yuqori darajasi, sanatoriya kurort dam olish maskanlarini kengaytirish, sayyohlar xavfsizligini taʼminlash tizimi muhim ahamiyatga ega. Ushbu turdagi sayohat industriyasi boshqaruvi AQShda ishlaydi.

Ikkinchi model, turizmni muhim kuchlar va moliyaviy resurslarga ega boʻlgan sektorlik vazirlik tomonidan koʻrib chiqilishiga asoslanadi. Ushbu yondashuv, keladigan turistlarning manfaatlari milliy turizm mahsuloti va turizm infratuzilmasini yaratish hamda qoʻllab-quvvatlash, toʻgʻridan-toʻgʻri xorijiy investitsiyalarni jalb etish, kichik va oʻrta biznesni qoʻllab-quvvatlash va xorijiy sayyohlar xavfsizligini taʼminlash uchun katta mablagʻ talab qilganda samarali boʻladi. Ushbu model Turkiya, Bolgariya, Misr, Malayziya kabi mamlakatlarda faoliyat yuritadi.

Uchinchi model turizmni rivojlantirish va davlat tomonidan tartibga solish funksiyalari koʻp tarmoqli vazirlikka yuklatilgan. Vazirlik normativ-huquqiy bazani ishlab chiqadigan va takomillashtiradigan maxsus boʻlinma tashkil qiladi; turizmni rivojlantirish boʻyicha boshqa davlatlar va xalqaro tashkilotlar bilan munosabatlarni tartibga soladi; vazirliklar, idoralar va mintaqaviy hokimiyatlarni xalqaro turizmni rivojlantirish boʻyicha muvofiqlashtiradi; Xalqaro sayyohlik koʻrgazmalari va yarmarkalarida ishtirok etadigan chet el turistik mahsulotlarini chet elga olib chiqadi. Bu model Ispaniya, Gollandiya, Buyuk Britaniya singari Yevropa mamlakatlarida keng tarqalgan.

Turistik boshqaruv modellarining barqaror rivojlanish mexanizmlari va global turizm industriyasining samaradorligi bilan oʻzaro aloqalari oʻzgarishsiz qolib kelgan. Biroq, Oʻzbekistonda qisqa fursatda mazkur sohaga yetarlicha eʼtibor qaratilishi natijasida, zamonaviy turizm industriyasini shakllantirish uchun barcha imkoniyat va shart-sharoitlar yaratildi. Shu bilan birga, mamlakatimizda turizmni rivojlantirishga kompleks yondashish, zamonaviy sayyohlik infratuzilmasi obʼektlarini shakllantirish, hududlardagi mavjud salohiyatdan toʻliq va samarali foydalanish borasida amalga oshirilayotgan ishlar ham bugungi kunning dolzarb masalalaridan biriga aylantirildi[2]. Bugungi kunda xalqaro turizm tarmogʻiga dunyo boʻylab yaratilayotgan har oʻn ikkinchi yangi ish oʻrni toʻgʻri kelib, keyingi oʻn yillikda dunyo miqyosida 120 million

kishining (ishsiz aholining 3,5 foizi) ushbu tarmoqda ish bilan ta'minlanishi kutilmoqda. U mamlakatlar o'rtasidagi hamkorlikni rivojlantirish hamda investitsiya oqimini ta'minlash uchun muhim vosita bo'lib hisoblanadi[3]. O'zbekiston Prezidentining «O'zbekiston Respublikasining turizm sohasini jadal rivojlantirishni ta'minlash chora-tadbirlari to'g'risida»gi farmoni sohaning eng dolzarb muammolarini yechishda, aniq chora-tadbirlar belgilashda alohida ahamiyat kasb etadi. Mazkur farmonda turizmni yangi bosqichga ko'tarish, uni mamlakat iqtisodiyotining muhim strategik sektoriga aylantirish ko'zda tutilgan. Shuningdek, turizm tarmog'ini boshqarishni tubdan takomillashtirish, bu borada yurtimiz imkoniyatlarini namoyon qilish, barcha hududlarda mazkur tarmoqlar faoliyatini yetakchi kuchga aylantirish bo'yicha muhim vazifa va yo'nalishlar aniq belgilab berildi. Sayyohlikning iqtisodiyotga ta'siri, aholi farovonligini yuksaltirishdagi ahamiyatini inobatga olib, Respublikamizning tarixiy obidalarga boy xamda guzal viloyatlarida ham mazkur soha izchil rivojlantirilmoqda. Ular zaminidagi mavjud ulkan tarixiy, boy arxeologik, ma'rifiy va ekologik salohiyatdan samarali foydalangan holda turistik infratuzilmalarni shakllantirish borasida bosqichma-bosqich amaliy ishlar olib borilayotgani ijobiy samara bermoqda.

**Tadqiqot metodologiyasi.** Tadqiqotda rivojlangan mamlakatlar turizm industriyasi bo'yicha mavjud nazariyalar o'rganildi va mamlakatimizdagi uning rivojlanish jarayonlari tahlil qilindi. Tadqiqotni amalga oshirishda analiz va sintez, qiyosiy baholash usullari qo'llanildi. Statistik manba sifatida, O'zbekiston Respublikasi Davlat statistika qo'mitasining ma'lumotlaridan keng foydalanildi. Jahon rivojlangan mamalakatlar turizm soxasi kabi respublikamizda ham xizmat ko'rsatish tarmog'ining jadal rivojlanayotgan eng istiqbolli sohalaridan biri turizm hisoblanadi. Shuningdek, turizmning rivojlanish tarixi juda qadim zamonlarga borib taqalgani holda, turizm xalqlar o'rtasida do'stlik rishtalarini mustahkamlashga xizmat qilgan. Bundan tashqari, odamlar madaniy va diplomatik aloqalarni o'rnatish, yangi o'lkalarni kashf etish, dunyoni ko'rish, undagi yangiliklarni o'rganish va bilish, shuningdek xamkorlik munosabatlari, savdo-sotiqni rivojlantirish maqsadida sayohat qilishgan.

Qadimda savdo-sotiq karvonlari yo‘llari kesishgan, madaniyatlar va sivilizatsiyalar tutashgan chorrahada joylashgani uchun Buyuk Ipak yo‘li asosi Markaziy Osiyo mintaqasi bu jarayonda muhim o‘rin egallaydi. Milodning boshlarida qadimgi dunyoning ilg‘or madaniyatli davlatlari asosan to‘rttaga: Rim, Parfiya, Xitoy va Kushon davlatlariga bo‘linar edi. G‘arbda Britan orollaridan sharqda Tinch okeani sohillarigacha cho‘zilgan bu zabardast saltanatlar insoniyat tarixida birinchi bo‘lib «Buyuk ipak yo‘li» deb nomlanuvchi yo‘l bilan bog‘landilar. Ipak yo‘li rivojlanib borgan sari podsholarning o‘zaro elchilar yuborishlari, bir-birlariga har xil sovg‘alar in‘om etishlari an‘anaga aylandi[4]. Mustaqillik yillarida O‘zbekistonda mazkur sohani me‘yoriy-huquqiy bazasini takomillashtirish, nafaqat mamlakatimiz, balki uning mintaqalari darajasida ham turizmni, turizm infratuzilmasini yanada rivojlantirishga qaratilgan Prezident farmonlari qonunlar, hukumat qarorlari qabul qilinib, hayotga tatbiq qilinib kelinmoqda. Oxirgi O‘zbekiston Respublikasi Prezidenti Sh. Mirziyoevning 2017 - yil 16 - avgustda PQ-3217-sonli “2018-2019 - yillarda Turizm sohasini rivojlantirish bo‘yicha birinchi navbatdagi chora-tadbirlar to‘g‘risida” xamda O‘zbekiston Respublikasi Prezidentining 2019 - yil 5 - yanvardagi PF-5611-sonli farmoniga binoan “2019-2025 - yillarda O‘zbekiston Respublikasida turizm sohasini rivojlantirish Konsepsiyasi” ishlab chiqildi. Unda barcha amalga oshiriluchi vazifalar qulay iqtisodiy sharoitlar va omillarni yaratish bo‘yicha olib borilayotgan islohotlarning samaradorligini oshirish, turizm sohasini jadal rivojlantirish bo‘yicha ustuvor maqsad va vazifalarni belgilash, uning iqtisodiyotdagi o‘rni va ulushini oshirish, xizmatlarni diversifikatsiyalash va ularning sifatini oshirish hamda turizm infratuzilmasini takomillashtirishga qaratilgan[5].

**Turizm sohasining joriy holati tahlili o‘rganilganda oxirgi 2010-2017 - yillar davomida turizm xizmatlari eksporti hajmi ikki baravar oshganligi va 2017 - yilda 546,9 million AQSh dollari, 2018 - yilda esa - 1 041 million AQSh dollarini tashkil etdi. 2016 - yilgacha xorijiy tashrif buyuruvchilar sonining o‘rish sur‘ati o‘rtacha yillik 8 foizni, 2017 - yilda 7 foizni tashkil qilib, 2,69 million nafardan oshdi. 2018 - yil yakunlari bo‘yicha respublikaga 5,3 million xorijiy turistlar tashrif buyurilganligi,**

xususiy sektorni qo‘llab-quvvatlash va muhofaza qilishga qaratilgan choralar ko‘rilgani natijasida, 2015 - yilda 398 tani tashkil qilgan turizm tashkilotlari soni 2018 - yil yakuni bo‘yicha 950 taga, mehmonxona xo‘jaliklari soni - 661 tadan 900 taga yetganligi ma‘lum bo‘ldi.

1-jadval

### 2019-2025 yillarda O‘zbekiston Respublikasida turizm sohasini rivojlantirish

#### Konsepsiyasini amalga oshirishning maqsadli

#### KO‘RSATKICHLARI[6]

T/r	Ko‘rsatkichlar nomi	2018 y.	2019 y.	2020 y.	2021 y.	2022 y.	2023 y.	2024 y.	2025 y.
1.	O‘zbekistonga tashrif buyuradigan xorijiy turistlar soni(ming kishi)	4 800	5 889,9	6 302,2	6 743,3	7 282,8	7 865,4	8 494,7	9 089,3
2.	Turizm xizmatlari eksporti (mln AQSh dollari)	951	1 166,9	1 271,9	1 399,1	1 553	1 739,4	1 965,5	2 232,8
3.	Ichki turistlar soni (mingta tashrif)	14 000	15 640	17 230	18 806	20 317	21 867	23 404	25 010
4.	Mehmonxonalar va shu kabi joylashtirish vositalari soni (dona)	910	1 098	1 609	2 394	2 562	2 715	2 851	2 994
5.	Joylashtirish vositalaridagi xonalar soni (ming)	22,0	24	33,7	48,7	52,1	55,2	58,0	60,9

7.	Joylashtirish vositalaridagi o‘rinlar soni (ming)	47,8	52,5	73,6	105,9	113,3	120,1	126,1	132,4
8.	Turoperatorlar soni (nafar)	957	1 053	1 158	1 262	1 325	1 458	1 531	1 676

*Izoh: Prognoz qilinayotgan ko‘rsatkichlarga turizmni rivojlantirish bo‘yicha davlat va hududiy dasturlarni amalga oshirish natijalaridan kelib chiqqanholda o‘zgartirishlar kiritilishi mumkin.*

1-jadval ma‘lumotlaridan ko‘rinib turibdiki, 2019 - yil turistik xizmatlar eksporti 951 mln.so‘m, xorijiy fuqarolarga xizmat ko‘rsatish 4800 ming kishi, O‘zbekiston Respublikasida turistik faoliyat va joylashtirish, mehmonxonalar va shu kabi joylashtirish vositalari soni 410ming xamda joylashtirish vositalaridagi o‘rinlar soni 47.8 ming xamda teng bo‘ldi.

**Tadqiqot natijalarining muhokamasi** shuni ko‘rsatdiki, rivojlangan mamlakatlarda aynan turizm industriyasi rivojlanishi evaziga yangi ishchi o‘rinlar yaratiladi, aholi yashash turmush sharoitlarining yaxshi tomonga o‘zgarishi uchun shart-sharoitlar yaratiladi. Turizm sohasini rivojlantirishga bo‘lgan zaruriyat ta‘lim sifati darajasi ko‘tarilishi, milliy tarixiy obidalarimiz haqidagi ma‘lumotlarni keng dunyoga tanilishi, aholiga tibbiy xizmat ko‘rsatish tizimi takomillashuvi, turizm orqali axborot tarqatishning yangi vositalarini tatbiq etish va h. k. uchun zamin yaratadi. Turizm industriyasi ko‘proq mamlakatimizni madaniy potensialni saqlab qolib, uni rivojlantirishga ta‘sir o‘tkazadi, turli davlatlar va halqlar o‘rtasidagi kelishuvlarni mustahkamlashuviga olib boradi, hokimiyat, jamoat tashkilotlari va savdo tuzilmalarini atrof muhitni muxofaza qilish ishlarida qatnashishga majbur qiladi. Shunday qilib, turizm iqtisodiyotning daromadli sohasi bo‘lib, turizm biznesida muvaffaqiyatga erishish uchun iste‘molchilarning turistik menejment va marketing sohalaridagi amaliyot, shuningdek turistik xizmatlarga bo‘lgan ehtiyojlariga



asoslangan holda turmahsulotni ishlab chiqarib uni sotishni tashkillashtirish, halqaro huquq normalari va qoidalari rioya qilgan xolda turizm xizmat bozori konyunkturasi haqida yaxshi bilim va ko'nikmalarni oshirishni talab etiladi. Xar bir hududda turizmni tashkillashtirishda qo'riqlanadigan tabiiy manzillarni rejalashtirish, unda turizmni rivojlantirish ehtiyojlarini hisobga olish va tabiatni muhofaza qilish maqsadlariga halaqit bermaslik lozim. Davlat turizm yo'nalishlarida soliq va bojxona siyosati, kreditlar, mutaxassislar tayyorlashni investitsiya orqali ularni rag'batlantirib boradi. Vaxolanki, hukumat turizmga iqtisodiyotning muhim sohalaridan biri, soliqlar orqali budjetga mablag' tushiradigan va ish bilan bandlikni, xalqaro munosabatlarni yaxshilaydigan yo'nalishlardan biri sifatida qaraydi.

**Xulosa va takliflar.** Shuni alohida ta'kidlash kerakki, O'zbekiston Respublikasining Prezidenti Farmoniga ko'ra turizm sohasini rivojlantirishning asosiy bosqichlari quyidagilardan iborat:

2019 - 2020 yillarda - turizmni rivojlantirish uchun mustahkam qonunchilik bazani yaratishga qaratilgan institutsional islohotlar, infratuzilmani modernizatsiyalash va mamlakat brendini targ'ib qilish;

2021 - 2025 yillarda - mamlakat iqtisodiyotida turizm industriyasi ulushini ko'paytirish. Ushbu yo'nalishda zarur infratuzilmani rivojlantirish va dunyo bozorida respublikaning turizm salohiyatini targ'ib qilish orqali mamlakatning yalpi ichki mahsulotida turizm ulushini 5 foizgacha (2017 - yil yakuni bo'yicha 2,3%) yetkazish, shuningdek, 2025 - yil yakuniga qadar 9 milliondan ortiq turistlarni, shu jumladan uzoq xorijdan - 2 million turistni jalb qilish belgilab quyilgan. Farmonda uzoq istiqbolda O'zbekiston turizmi milliy iqtisodiyotdagi yutuqlar bilan cheklanib qolmasdan, mintaq va dunyo turistik xizmatlari bozoriga eng raqobatbardosh davlatlar qatorida kirib borishi mumkin. Shuningdek, turizm tarmog'ini jadal rivojlantirishni ta'minlash, uni milliy iqtisodiyotning strategik sektori maqomiga ega sohasiga aylantirish, turizmni iqtisodiyotni barqaror o'stirish va mintaqalarda mavjud ulkan salohiyatdan foydalanish, aholi turmush darajasi va sifatini oshirishning qudratli vositasiga aylantirishga yo'naltirilgan. Fikrimizcha, hududlarda

turizmni rivojlantirishga quyidagi omillar ta'sir ko'rsatadi: ekoturistik tashkilotlarda turistlarni ko'proq jalb qilish mexanizmi ishlab chiqilishi va amaliyotga tatbiq etilishini, xorijiy davlatlar bilan ekoturizm sohasidagi hamkorlik aloqalari mustahkamlanishi, ekoturistik tashkilotlar va turagentlarning respublikamizdagi sifatli turistik mahsulotlarni jahon bozoriga olib chiqish va sotish faoliyati qat'iy yo'lga qo'yilishi, turistlar uchun kamida bir necha xil tildagi yo'l belgilarini ko'paytirish, ma'lumot beruvchi markazlar, internet portalini ko'paytirish, ahvoli gavjum joylarda turistik xaritalarni osish, yo'l chetiga turistik ob'ektlar haqida ma'lumot beruvchi yo'l belgilarini o'rnatishni ko'paytirish, yagona internet portalida shaharlarda mavjud bo'lgan barcha turistik tashkilotlar, diqqatga sazovor joylar, do'konlar va hokazolar haqidagi barcha ma'lumotlarni o'z vaqtida yangilash. O'ylaymizki, yuqoridagi tavsiya va takliflarni hayotga tatbiq etish turizm infratuzilmasini yanada rivojlanishi, uning jozibadorligini oshirib, turistlar oqimining ko'payishiga olib keladi.

### Foydalanilgan adabiyotlar

1. Abdugapparovna M. S., Abdurazzaqovich K. A. THE NEED TO ENSURE ECONOMIC SECURITY IN THE HEALTH SECTOR //Web of Medicine: Journal of Medicine, Practice and Nursing. – 2024. – T. 2. – №. 1. – C. 75-78.
2. Gapparova G. N., Abdugapparovna M. S. BOLALARDA URIKOZURIK NEFROPATIYANI KLINIKO-LABORATOR DIAGNOSTIKASI //Лучшие интеллектуальные исследования. – 2023. – Т. 5. – №. 1. – С. 13-19.
3. Abdugapparovna M. S., Buribaevna I. S. TA'LIM-TARBIYA SOHASIGA YANGICHA YONDASHUV—BARQAROR TARAQQIYOT GAROVI //Лучшие интеллектуальные исследования. – 2023. – Т. 5. – №. 1. – С. 3-8.
4. Rasulova M. et al. Investigation of the strength of thread connections of parts of workwear made of fabric of new structures //AIP Conference Proceedings. – AIP Publishing, 2023. – Т. 2789. – №. 1.
5. Shohista M., Abdukhalim K. TIBBIYOT OLIY O'QUV YURTLARIDA TAHSIL OLUVCHI TALABALARNI SOG'LIKNI SAQLASH IQTISODIYOTI

FANINI O'RGANISH ZARURIYATI //Involta Scientific Journal. – 2023. – Т. 2. – №. 4. – С. 6-11.

6. Abdugapparovna M. S., Alamovich K. A. Mechanisms for Increasing the Economic and Organizational Efficiency of the Management of the Medical Service Sector //Texas Journal of Medical Science. – 2023. – Т. 18. – С. 150-153.

7. Мамасолиева Ш., Хегай Р. О. ПОВЫШЕНИЯ МЕХАНИЗМОВ ЭКОНОМИЧЕСКОЙ И ОРГАНИЗАЦИОННОЙ ЭФФЕКТИВНОСТИ УПРАВЛЕНИЯ СФЕРОЙ ЗДРАВООХРАНЕНИЯ //Involta Scientific Journal. – 2023. – Т. 2. – №. 3. – С. 37-43.

8. Шеховцов С. и др. СРАВНИТЕЛЬНЫЙ АНАЛИЗ РАННИХ ПОСЛЕОПЕРАЦИОННЫХ ОСЛОЖНЕНИЙ У БОЛЬНЫХ С КОРОТКИМИ И СЛОЖНЫМИ ПРЯМОКИШЕЧНЫМИ СВИЦАМИ, ПЕРЕНЕСШИХ РАЗЛИЧНЫЕ МЕТОДИКИ ТЕХНОЛОГИИ ЛАЗЕРНОЙ ОБЛИТЕРАЦИИ СВИЩЕЙ FiLAC //Биология. – 2023. – №. 4. – С. 146.

9. Alimdjanovich R. J., Avazovna Y. S., Abdugapparovna M. S. ФОРМИРОВАНИЯ И УЛУЧШЕНИЯ ЗДОРОВОГО ОБРАЗА ЖИЗНИ У СТУДЕНТОВ ВЫСШИХ УЧЕБНЫХ ЗАВЕДЕНИЙ //JOURNAL OF BIOMEDICINE AND PRACTICE. – 2022. – Т. 7. – №. 3.

10. Avazovna Y. S., Abdugapparovna M. S. SOG 'LOM TURMUSH TARZINI OLIY TA'LIM MUASSASASI TALABALARI O 'RTASIDA SHAKLLANTIRISHNING O 'ZIGA XOS XUSUSIYATLARI O 'RGANISH //JOURNAL OF BIOMEDICINE AND PRACTICE. – 2022. – Т. 7. – №. 3.

11. Ма'мura X., Sanjar K., Shoxista M. YUQUMLI KASALLIKLARGA CHALINGAN BEMORLARGA IXTISOSLASHTIRILGAN HAMSHIRALIK YORDAMINI TASHKIL ETISH AHAMIYATI VA UNING XUSUSIYATLARI //Involta Scientific Journal. – 2022. – Т. 1. – №. 5. – С. 233-240.

12. Ганиева З., Мамасолиева Ш. Maktabgacha ta'lim muassasalarida hamshiralik ishini tashkil etish va takomillashtirishda hamshira bo'lishining afzal tomonlari //Общество и инновации. – 2022. – Т. 3. – №. 2/S. – С. 400-406.

13. Ганиева З., Мамасолиева Ш. Преимущества профессии медсестры в организации и совершенствовании сестринского дела в дошкольном образовании //Общество и инновации. – 2022. – Т. 3. – №. 2. – С. 400-406.
14. Мамасолиева Ш. АҲОЛИГА КЎРСАТИЛАЁТГАН ТИББИЙ ХИЗМАТЛАРНИНГ ИЖТИМОЙ-ИҚТИСОДИЙ МЕХАНИЗМИ ТАШКИЛИЙ ЖИҲАТЛАРИ //Involta Scientific Journal. – 2022. – Т. 1. – №. 4. – С. 419-428.
15. Ризаев Ж. А. Шахноза Авазовна ЮЛДОШЕВА, and Шохиста Абдугаппаровна МАМАСОЛИЕВА." //ФОРМИРОВАНИЯ И УЛУЧШЕНИЯ ЗДОРОВОГО ОБРАЗА ЖИЗНИ У СТУДЕНТОВ ВЫСШИХ УЧЕБНЫХ ЗАВЕДЕНИЙ." ЖУРНАЛ БИОМЕДИЦИНЫ И ПРАКТИКИ. – 2022. – Т. 7.
16. Jasur R., Shakhnoza Y., Shoxista M. Forming and improving a healthy lifestyle among students of higher educational institutions //Journal of Biomedicine and Practice. – 2022. – Т. 7. – №. 3. – С. 181-189.
17. ЮЛДОШЕВА Ш. А., МАМАСОЛИЕВА Ш. А. SOG ‘LOM TURMUSH TARZINI OLIY TA’LIM MUASSASASI TALABALARI O ‘RTASIDA SHAKLLANTIRISHNING O ‘ZIGA XOS XUSUSIYATLARI O ‘RGANISH //ЖУРНАЛ БИОМЕДИЦИНЫ И ПРАКТИКИ. – 2022. – Т. 7.
18. Alimdjanovich R. J., Avazovna Y. S., Abdugapparovna M. S. ФОРМИРОВАНИЯ И УЛУЧШЕНИЯ ЗДОРОВОГО ОБРАЗА ЖИЗНИ У СТУДЕНТОВ ВЫСШИХ УЧЕБНЫХ ЗАВЕДЕНИЙ //JOURNAL OF BIOMEDICINE AND PRACTICE. – 2022. – Т. 7. – №. 3.
19. Mamasolieva S. A., Karimov A. A. SCIENTIFIC ASPECS OF FORMATION OF THE SOCIO-ECONOMIC MECHANISM OF MEDICAL SERVICES //Oriental renaissance: Innovative, educational, natural and social sciences. – 2022. – Т. 2. – №. 3. – С. 484-490.
20. Аскарлова Н., Мамасолиева Ш., Гаррарова Г. Клиническая характеристика психо-неврологического состояния часто болеющих детей дошкольного возраста //Общество и инновации. – 2020. – Т. 1. – №. 2/S. – С. 378-385.

21. Tolibov M. M., qizi Buronova F. Z. MAHALLIY OZON TERAPIYASINI QO 'LLAGAN HOLDA KOMPLEKS DAVOLASH FONIDA YOSH ERKAKLARDA SURUNKALI URETROGEN PROSTATIT (CUP) KECHISHINI O 'RGANISH //Educational Research in Universal Sciences. – 2024. – T. 3. – №. 1. – C. 417-421.

22. Tolibov M. M., Shodmonova M. A. BOLALARDA ATOPIK DERMATIT (AD) PATOGENEZIDA GENETIK OMILLARNING ROLINI BAHOLASH VA IMMUNOLOGIK PARAMETRLARGA QARAB ANIQLANGAN POLIMORFIZMLARNING PROGNOZIK AHAMIYATINI ANIQLASH //Educational Research in Universal Sciences. – 2024. – T. 3. – №. 1. – C. 406-410.

23. Tolibov M. M. et al. ATOPIK DERMATITNI DAVOLASHDA LAZER TERAPIYASINING SAMARADORLIGI //Educational Research in Universal Sciences. – 2024. – T. 3. – №. 1. – C. 286-289.

24. Utayev A. J., Tolibov M. M., Axmedova M. M. MANAGEMENT APPROACHES FOR CHRONIC URETHROGENIC PROSTATITIS //Modern Scientific Research International Scientific Journal. – 2024. – T. 2. – №. 1. – C. 151-156.

25. Makhmudovich T. M. ATOPIC DERMATITIS INCIDENT LEVEL, DIAGNOSTIC CRITERIA AND PROGNOSTIC IMPORTANCE //JOURNAL OF APPLIED MEDICAL SCIENCES. – 2023. – T. 6. – №. 4. – C. 158-168.

26. Толибов М. М. СОВРЕМЕННОЕ СОСТОЯНИЕ ПРОБЛЕМ ЭПИДЕМИОЛОГИИ, МИКРОБИОЛОГИИ И ТЕРАПИИ АКНЕ (ОБЗОР ЛИТЕРАТУРЫ) //SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM. – 2023. – T. 2. – №. 14. – C. 215-224.

27. Иляевна P. U. et al. DERMATOSCOPIC PAINTING SOME COMMON DERMATOSES //World scientific research journal. – 2023. – T. 16. – №. 2. – C. 107-120.

28. Пыяевна P. U. et al. MODERN TRENDS IN TREATMENT SICK MICROSPORIA //World scientific research journal. – 2023. – Т. 16. – №. 2. – С. 98-106.
29. Kholikovich E. S. et al. APPLICATION OF" BETASALIK" OINTMENT IN THE THERAPY OF CHRONIC INFLAMMATORY AND ALLERGIC DERMATOSES //Journal of new century innovations. – 2023. – Т. 31. – №. 3. – С. 56-62.
30. Мансур Т. М., Вохидов Ж. Ж. СОВРЕМЕННЫЕ МЕТОДЫ ЛЕЧЕНИЯ БОЛЕЗНИ ВИТИЛИГО //SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM. – 2023. – Т. 2. – №. 14. – С. 234-244.
31. Мансур Т. М., Вохидов Ж. Ж. СОВРЕМЕННОЙ МЕТОДЫ АЛОПЕЦИЯ ДИАГНОСТИКА И ЛЕЧЕНИЕ //SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM. – 2023. – Т. 2. – №. 14. – С. 225-233.
32. Толибов М. М. и др. ОПТИМИЗАЦИЯ К ЛЕЧЕНИЮ ТЯЖЕЛЫХ ОБОЖЖЕННЫХ БОЛЬНЫХ //SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM. – 2023. – Т. 2. – №. 14. – С. 190-199.
33. Абдуллаев Д. М., Тошев С. У., Толибов М. М. КОМПЛЕКСНЫЙ МЕТОД ЛЕЧЕНИЯ ВУЛЬГАРНЫХ УГРЕЙ //Актуальные аспекты медицинской деятельности. – 2021. – С. 254-256.

## TOPICAL USE OF PIMICRALIMUS FOR THE TREATMENT OF PSORIASIS

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***Annotation:** The problem of treatment of lichen planus and currently remains relevant. An important task of the topical application of medicinal compositions is to create an effective concentration in the focus of inflammation and maintain such a concentration for a long period of time. This study describes a method for the treatment of patients with lichen planus with the inclusion of sesoran ointment in standard therapy. A clinical study showed that with the use of the above preparation, regeneration of lichen planus was observed by the beginning of 2 weeks. The inclusion of Sesoran ointment in the treatment regimen allows accelerating epithelialization and tissue repair, and stabilizing the inflammatory process.*

***Key words:** Lichen planus, treatment.*

**Introduction:** In recent years, the prevalence of lichen planus (LP) in practice has expanded somewhat. Among diseases of the oral mucosa, lichen planus occurs in 75-80% of cases, affecting only the mucous membrane in isolation. It is characterized by a recurrent persistent course with a variety of clinical forms. Despite numerous



studies, the etiology and pathogenesis of this disease, which is resistant to ongoing therapy, remain unclear.

There are three most common concepts that include the role of functional and organic disorders of the nervous system, toxic-allergic influence, and the impact of the microbial factor. Speaking about functional disorders of the nervous system, a number of authors point to stress as a factor that plays a decisive role in the occurrence of lichen planus of the oral mucosa. A positive correlation was found between stressful situations and the appearance of rashes in the oral cavity, while exudative-hyperemic forms of the disease are most often recorded. The problem of treatment of patients with lichen planus remains relevant. There are many reasons for this. First of all, lichen planus, like no other dermatosis, depends on the neurogenic factor. Very often, the first manifestations of the disease appear after stressful situations. In the conditions of a modern industrial city, overvoltage and nervous overload are so common that the prevalence of lichen planus is steadily increasing. Unexplained questions of the etiopathogenesis of lichen planus cause the use of numerous medications for its treatment, but modern therapy does not always provide a good result. Treatment, as a rule, is delayed for a long period, it is rarely possible to achieve stable and positive remission.

**Aim:** To study the effectiveness and drug Elidel in the treatment of lichen planus.

**Materials and methods:** 23 patients aged 18 to 56 years with a disease duration of at least 5 months to 4 years with various forms of lichen planus were examined, which made up two groups: the main (11 patients) and control (12 patients). Patients in the control group received traditional treatment, without the use of the drug "Elidel". This drug is a combination drug for topical use. Comprehensive treatment was carried out according to generally accepted schemes, including general and local therapy. All patients were necessarily sent for consultations of a general practitioner, endocrinologist, allergist and other specialists for the purpose of diagnosing and treating somatic diseases. Pharmacotherapy included the appointment of sedative therapy (novopassitis; motherwort tincture); vitamins. All irritating factors in the oral

cavity, sharp edges of the teeth were eliminated, dentures, fillings made of different metals were replaced, a thorough sanitation of the oral cavity was carried out. The affected areas of the oral mucosa were treated with non-irritating antiseptics. Local treatment was aimed at eliminating pain and inflammation, normalizing microcirculation and stimulating epithelialization. For this purpose, applications of the drug "Elidel" were used.

**Results:** In group 1, clinical recovery was observed within (average) 21-25 days; in group 2, clinical recovery was observed within (average 12-14 days). Minor symptoms of skin irritation on the use of Elidel ointment 0.025% were observed in 2 out of 3 patients at the beginning of the application, but this did not require discontinuation of the drug.

After the treatment, the patients were under control for the detection of relapses for 6 months. There was no recurrence in the group of patients receiving Elidel; in the 1st group of patients, the disease recurred in 1 patient out of 3=x. As a result of the therapy at the site of application of Elidel ointment, no skin atrophy was observed.

**Conclusions:** Given the lack of a unified concept regarding the etiology and pathogenesis of lichen planus, treatment should be comprehensive using modern medicines. Consistent use of elidel ointment in the treatment of manifestations of lichen planus showed high efficacy in relieving symptoms; most patients achieved long-term remission, were well tolerated, and there were no complications.

## LITERATURE

1. Hikmatovich I. N., Xolmatovich J. A., Temirovich E. R. Application of Topical Treatment with Pimicalimus for the Treatment of Papulosis Dermatoses //Web of Semantic: Universal Journal on Innovative Education. – 2023. – T. 2. – №. 2. – C. 24-28.
2. Hikmatovich I. N., Temirovich E. R., Toxirovich M. T. Effectiveness of Topical Therapy in the Treatment of Genital Herpes //Web of Semantic: Universal Journal on Innovative Education. – 2023. – T. 2. – №. 2. – C. 29-33.

3. Hikmatovich I. N., Temirovich E. R., Toxirovich M. T. Local Treatment of Patients with Genital Herpes //Web of Semantic: Universal Journal on Innovative Education. – 2023. – T. 2. – №. 2. – C. 19-23.
4. Hikmatovich I. N. Evaluation of the Efficacy of External Therapy in Sick Children with Alergodermatitis //Web of Semantic: Universal Journal on Innovative Education. – 2023. – T. 2. – №. 2. – C. 50-54.
5. Hikmatovich I. N., Toxirovich M. T., Xolmatovich J. A. Effectiveness of Sevoran in the Treatment of Papulosis Dermatitis //Web of Semantic: Universal Journal on Innovative Education. – 2023. – T. 2. – №. 2. – C. 40-44.
6. Hikmatovich I. N. Evaluation of the Effectiveness of Peperator Kuralimus in the Treatment of Patients with Atopic Dermatitis //Web of Semantic: Universal Journal on Innovative Education. – 2023. – T. 2. – №. 2. – C. 45-49.
7. Hikmatovich I. N., Temirovich E. R., Egamberdiyevich M. A. Clinical Evaluation of the Efficacy of Acne Vulgaris Laser Therapy //Central Asian Journal of Medical and Natural Science. – 2022. – T. 3. – №. 5. – C. 667-669.
8. Hikmatovich I. N., Temirovich E. R., Xolmatovich J. A. HERPIS VIRUSINI MAHALLIY DAVOLASH UCHUN VIFIRONNI QO‘LLASH //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – C. 349-351.
9. Hikmatovich I. N., Temirovich E. R., Muradovich Y. M. O‘SMIRLARDA YUZAKI PYODERMANI DAVOLASHDA TOPIKAL TERAPIYA //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – C. 355-358.
10. Hikmatovich I. N., Temirovich E. R., Xolmatovich J. A. BOLALAR DERMATOZINI DAVOLASHDA MAHALLIY TERAPIYA SAMARALIGINI BAHOLASH //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – C. 352-354.

11. Islamov N. H., Yusupov M. M., Oripov R. A. CHEKLANGAN SKLERODERMANI DAVOLASHNING SAMARALI //Educational Research in Universal Sciences. – 2023. – T. 2. – №. 14. – C. 324-329.
12. Mardonovich N. R. et al. Epidemiological Analysis of Trichofitia Disease in Samarkand Region //Journal of Survey in Fisheries Sciences. – 2023. – T. 10. – №. 1S. – C. 4981-4994.
13. Anvarovich O. R., Ravshanovich K. K. A New View on the Course of Sexually Transmitted Diseases //Web of Semantic: Universal Journal on Innovative Education. – 2023. – T. 2. – №. 2. – C. 189-193.
14. Anvarovich O. R., Javlonovna P. A. Takrakor in the Treatment of Itching Dermatitis //Web of Semantic: Universal Journal on Innovative Education. – 2023. – T. 2. – №. 2. – C. 184-188.
15. Anvarovich O. R. Management of Sick Children with Adopic Dermatitis //Web of Semantic: Universal Journal on Innovative Education. – 2023. – T. 2. – №. 2. – C. 179-183.
16. Oripov R. A. LABORATORY PARAMETERS IN CHILDREN WITH VERIFIED MENINGITIS //Modern Scientific Research International Scientific Journal. – 2023. – T. 1. – №. 7. – C. 162-168.
17. Davlyatovna K. G., Anvarovich O. R., Xikmatovich I. N. UROGENITAL XLAMIDIYADA MIRAMISTINNING SAMARADORLIGINI BAHOLASH //Нововведения Современного Научного Развития в Эпоху Глобализации: Проблемы и Решения. – 2023. – T. 1. – №. 4. – C. 53-59.
18. Kurbonalievich A. S. et al. UROGENITAL CHLAMYDIOSIS IS A CAUSE OF STERILITY AND CHRONIC PROSTATITIS IN MEN //Web of Scholars: Multidimensional Research Journal. – 2022. – T. 1. – №. 6. – C. 306-310.
19. Anvarovich O. R. et al. ETIOPATHOGENESIS AND CLINICAL COURSE SPECIFIC CHARACTERISTICS OF NEURODERMITIS DISEASE //Web of Scholars: Multidimensional Research Journal. – 2022. – T. 1. – №. 6. – C. 276-280.

20. Bakhodirovich T. I. et al. COMBINED IMMUNOTHERAPY IN THE TREATMENT OF CANDIDIASIAN INFECTIONS OF THE URINARY ORGANS //Web of Scholars: Multidimensional Research Journal. – 2022. – T. 1. – №. 6. – С. 257-263.
21. Tolibov M. M., qizi Buronova F. Z. MAHALLIY OZON TERAPIYASINI QO ‘LLAGAN HOLDA KOMPLEKS DAVOLASH FONIDA YOSH ERKAKLARDA SURUNKALI URETROGEN PROSTATIT (CUP) KECHISHINI O ‘RGANISH //Educational Research in Universal Sciences. – 2024. – T. 3. – №. 1. – С. 417-421.
22. Tolibov M. M., Shodmonova M. A. BOLALARDA ATOPIK DERMATIT (AD) PATOGENEZIDA GENETIK OMILLARNING ROLINI BAHOLASH VA IMMUNOLOGIK PARAMETRLARGA QARAB ANIQLANGAN POLIMORFIZMLARNING PROGNOZIK AHAMIYATINI ANIQLASH //Educational Research in Universal Sciences. – 2024. – T. 3. – №. 1. – С. 406-410.
23. Tolibov M. M. et al. ATOPIK DERMATITNI DAVOLASHDA LAZER TERAPIYASINING SAMARADORLIGI //Educational Research in Universal Sciences. – 2024. – T. 3. – №. 1. – С. 286-289.
24. Utayev A. J., Tolibov M. M., Axmedova M. M. MANAGEMENT APPROACHES FOR CHRONIC URETHROGENIC PROSTATITIS //Modern Scientific Research International Scientific Journal. – 2024. – T. 2. – №. 1. – С. 151-156.
25. Makhmudovich T. M. ATOPIC DERMATITIS INCIDENT LEVEL, DIAGNOSTIC CRITERIA AND PROGNOSTIC IMPORTANCE //JOURNAL OF APPLIED MEDICAL SCIENCES. – 2023. – T. 6. – №. 4. – С. 158-168.
26. Толибов М. М. СОВРЕМЕННОЕ СОСТОЯНИЕ ПРОБЛЕМ ЭПИДЕМИОЛОГИИ, МИКРОБИОЛОГИИ И ТЕРАПИИ АКНЕ (ОБЗОР ЛИТЕРАТУРЫ) //SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM. – 2023. – T. 2. – №. 14. – С. 215-224.

27. Иляевна P. U. et al. DERMATOSCOPIC PAINTING SOME COMMON DERMATOSES //World scientific research journal. – 2023. – Т. 16. – №. 2. – С. 107-120.
28. Иляевна P. U. et al. MODERN TRENDS IN TREATMENT SICK MICROSPORIA //World scientific research journal. – 2023. – Т. 16. – №. 2. – С. 98-106.
29. Kholikovich E. S. et al. APPLICATION OF" BETASALIK" OINTMENT IN THE THERAPY OF CHRONIC INFLAMMATORY AND ALLERGIC DERMATOSES //Journal of new century innovations. – 2023. – Т. 31. – №. 3. – С. 56-62.
30. Мансур Т. М., Вохидов Ж. Ж. СОВРЕМЕННЫЕ МЕТОДЫ ЛЕЧЕНИЯ БОЛЕЗНИ ВИТИЛИГО //SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM. – 2023. – Т. 2. – №. 14. – С. 234-244.
31. Мансур Т. М., Вохидов Ж. Ж. СОВРЕМЕННОЙ МЕТОДЫ АЛОПЕЦИЯ ДИАГНОСТИКА И ЛЕЧЕНИЕ //SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM. – 2023. – Т. 2. – №. 14. – С. 225-233.

## INDICATORS OF QUALITY OF LIFE IN PATIENTS WITH SYPHILIS BEFORE AND AFTER TREATMENT

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***Annotation:** This article attempts to reveal the main reasons for assessing the quality of life indicators in patients with syphilis in dynamics. To carry out scientific work, the author carried out the object of the study was 250 patients aged 16–67 years (mean age  $23.4 \pm 3.9$  years) with established diagnoses A51 "Early syphilis", A52 "Late syphilis", A53 "Other and unspecified forms of syphilis". The problem in question is still little studied, therefore, requires more thorough research.*

***Key words:** Syphilis, quality of life of patients.*

**Introduction:** Syphilis (outdated: lues from lat. Lues - infection) is a systemic venereal infectious disease affecting the skin, mucous membranes, internal organs, bones, nervous system with a successive change in the stages of the disease, caused by bacteria of the species *Treponema pallidum* (*pallidum treponema*) subspecies *pallidum*, belonging to the genus *Treponema* (*Treponema*) of the order Spirochaetes (*Spirochaetales*). The prognosis of the disease in most cases is favorable. Timely diagnosis and adequate treatment leads to a complete recovery. However, with a long-term chronic course and in cases of infection of the fetus in the womb,



persistent irreversible changes develop, leading to disability.

**Aim:** To assess the dynamics of the quality of life of patients with syphilis.

**Materials and methods:** The object of the study was 250 patients aged 16–67 years (mean age  $23.4 \pm 3.9$  years) with established diagnoses A51 "Early syphilis", A52 "Late syphilis", A53 "Other and unspecified forms of syphilis. To assess the quality of life indicators, a validated SF-36 questionnaire was used, using which patients were tested before treatment, 1 month and 3 months after the end of treatment. The study was conducted on the basis of the Orenburg Regional Clinical Dermatovenerological Dispensary. The questionnaire consists of 36 questions grouped into 8 scales. The data obtained were compared with the results of the reference database of population values of the standardized indicators of the questionnaire for residents of the Russian Federation. The calculation of the integral scales of the questionnaire was carried out according to the methodological recommendations developed by the Preference Company.

**Results:** In patients with primary syphilis, there was a decrease in the level of quality of life with a predominance of influence on the physical component of health (general health scale) before treatment (decrease to 56.8 - by 12.6%) and after 1 month (decrease to 59.8 -8%), and after 3 months - indicators of quality of life became close to the reference values (65). The greatest decrease was noted in the psychological component of health (on the scales of role activity, general health, vital activity, social functioning, emotional state) before the start of treatment for secondary syphilis (decrease to 49.8-17%), latent early (decrease to 55.2 -8% and late (decrease to 52 - by 13.4%) After 1 month, normalization is noted only with latent early syphilis (up to 59.5), after 3 months - there is a tendency to normalize indicators (up to 57) with latent syphilis late, although the average values for the population were not achieved. During the observation period in the secondary form of nosology, the indicators did not reach the reference indicators. The study showed a slight effect of the disease on the quality of life in latent syphilis, unspecified, both before treatment and after 1 and 3 months from the moment observations.

**Conclusions:** The study showed the heterogeneity of the impact of this disease on the indicators of the quality of life of patients, while there is a dynamics in their change depending on the stage of the disease, which must be taken into account as an important component for a full psycho-social and physical adaptation after treatment.

## LITERATURE

1. Hikmatovich I. N., Xolmatovich J. A., Temirovich E. R. Application of Topical Treatment with Pimicralimus for the Treatment of Papulosis Dermatosis //Web of Semantic: Universal Journal on Innovative Education. – 2023. – T. 2. – №. 2. – C. 24-28.
2. Hikmatovich I. N., Temirovich E. R., Toxirovich M. T. Effectiveness of Topical Therapy in the Treatment of Genital Herpes //Web of Semantic: Universal Journal on Innovative Education. – 2023. – T. 2. – №. 2. – C. 29-33.
3. Hikmatovich I. N., Temirovich E. R., Toxirovich M. T. Local Treatment of Patients with Genital Herpes //Web of Semantic: Universal Journal on Innovative Education. – 2023. – T. 2. – №. 2. – C. 19-23.
4. Hikmatovich I. N. Evaluation of the Efficacy of External Therapy in Sick Children with Alergodermatosis //Web of Semantic: Universal Journal on Innovative Education. – 2023. – T. 2. – №. 2. – C. 50-54.
5. Hikmatovich I. N., Toxirovich M. T., Xolmatovich J. A. Effectiveness of Sevoran in the Treatment of Papulosis Dermatosis //Web of Semantic: Universal Journal on Innovative Education. – 2023. – T. 2. – №. 2. – C. 40-44.
6. Hikmatovich I. N. Evaluation of the Effectiveness of Peporator Kuralimus in the Treatment of Patients with Atopic Dermatitis //Web of Semantic: Universal Journal on Innovative Education. – 2023. – T. 2. – №. 2. – C. 45-49.
7. Hikmatovich I. N., Temirovich E. R., Egamberdiyevich M. A. Clinical Evaluation of the Efficacy of Acne Vulgaris Laser Therapy //Central Asian Journal of Medical and Natural Science. – 2022. – T. 3. – №. 5. – C. 667-669.

8. Hikmatovich I. N., Temirovich E. R., Xolmatovich J. A. HERPIS VIRUSINI MAHALLIY DAVOLASH UCHUN VIFIRONNI QO‘LLASH //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – C. 349-351.

9. Hikmatovich I. N., Temirovich E. R., Muradovich Y. M. O‘SMIRLARDA YUZAKI PYODERMANI DAVOLASHDA TOPIKAL TERAPIYA //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – C. 355-358.

10. Hikmatovich I. N., Temirovich E. R., Xolmatovich J. A. BOLALAR DERMATOZINI DAVOLASHDA MAHALLIY TERAPIYA SAMARALIGINI BAHOLASH //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – C. 352-354.

11. Islamov N. H., Yusupov M. M., Oripov R. A. CHEKLANGAN SKLERODERMANI DAVOLASHNING SAMARALI //Educational Research in Universal Sciences. – 2023. – T. 2. – №. 14. – C. 324-329.

12. Mardonovich N. R. et al. Epidemiological Analysis of Trichofitia Disease in Samarkand Region //Journal of Survey in Fisheries Sciences. – 2023. – T. 10. – №. 1S. – C. 4981-4994.

13. Anvarovich O. R., Ravshanovich K. K. A New View on the Course of Sexually Transmitted Diseases //Web of Semantic: Universal Journal on Innovative Education. – 2023. – T. 2. – №. 2. – C. 189-193.

14. Anvarovich O. R., Javlonovna P. A. Takrakor in the Treatment of Itching Dermatitis //Web of Semantic: Universal Journal on Innovative Education. – 2023. – T. 2. – №. 2. – C. 184-188.

15. Anvarovich O. R. Management of Sick Children with Adopic Dermatitis //Web of Semantic: Universal Journal on Innovative Education. – 2023. – T. 2. – №. 2. – C. 179-183.

16. Oripov R. A. LABORATORY PARAMETERS IN CHILDREN WITH VERIFIED MENINGITIS //Modern Scientific Research International Scientific Journal. – 2023. – Т. 1. – №. 7. – С. 162-168.

17. Davlyatovna K. G., Anvarovich O. R., Xikmatovich I. N. UROGENITAL XLAMIDIYADA MIRAMISTINNING SAMARADORLIGINI BAHOLASH //Нововведения Современного Научного Развития в Эпоху Глобализации: Проблемы и Решения. – 2023. – Т. 1. – №. 4. – С. 53-59.

18. Kurbonalievich A. S. et al. UROGENITAL CHLAMYDIOSIS IS A CAUSE OF STERILITY AND CHRONIC PROSTATITIS IN MEN //Web of Scholars: Multidimensional Research Journal. – 2022. – Т. 1. – №. 6. – С. 306-310.

19. Anvarovich O. R. et al. ETIOPATHOGENESIS AND CLINICAL COURSE SPECIFIC CHARACTERISTICS OF NEURODERMITIS DISEASE //Web of Scholars: Multidimensional Research Journal. – 2022. – Т. 1. – №. 6. – С. 276-280.

20. Bakhodirovich T. I. et al. COMBINED IMMUNOTHERAPY IN THE TREATMENT OF CANDIDIASIAN INFECTIONS OF THE URINARY ORGANS //Web of Scholars: Multidimensional Research Journal. – 2022. – Т. 1. – №. 6. – С. 257-263.

21. Tolibov M. M., qizi Buronova F. Z. MAHALLIY OZON TERAPIYASINI QO ‘LLAGAN HOLDA KOMPLEKS DAVOLASH FONIDA YOSH ERKAKLARDA SURUNKALI URETROGEN PROSTATIT (CUP) KECHISHINI O ‘RGANISH //Educational Research in Universal Sciences. – 2024. – Т. 3. – №. 1. – С. 417-421.

22. Tolibov M. M., Shodmonova M. A. BOLALARDA ATOPIK DERMATIT (AD) PATOGENEZIDA GENETIK OMILLARNING ROLINI BAHOLASH VA IMMUNOLOGIK PARAMETRLARGA QARAB ANIQLANGAN POLIMORFIZMLARNING PROGNOSTIK AHAMIYATINI ANIQLASH //Educational Research in Universal Sciences. – 2024. – Т. 3. – №. 1. – С. 406-410.

23. Tolibov M. M. et al. ATOPIK DERMATITNI DAVOLASHDA LAZER TERAPIYASINING SAMARADORLIGI //Educational Research in Universal Sciences. – 2024. – Т. 3. – №. 1. – С. 286-289.

24. Utayev A. J., Tolibov M. M., Axmedova M. M. MANAGEMENT APPROACHES FOR CHRONIC URETHROGENIC PROSTATITIS //Modern Scientific Research International Scientific Journal. – 2024. – Т. 2. – №. 1. – С. 151-156.
25. Makhmudovich T. M. ATOPIC DERMATITIS INCIDENT LEVEL, DIAGNOSTIC CRITERIA AND PROGNOSTIC IMPORTANCE //JOURNAL OF APPLIED MEDICAL SCIENCES. – 2023. – Т. 6. – №. 4. – С. 158-168.
26. Толибoв М. М. СОВРЕМЕННОЕ СОСТОЯНИЕ ПРОБЛЕМ ЭПИДЕМИОЛОГИИ, МИКРОБИОЛОГИИ И ТЕРАПИИ АКНЕ (ОБЗОР ЛИТЕРАТУРЫ) //SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM. – 2023. – Т. 2. – №. 14. – С. 215-224.
27. Иляевна Р. У. et al. DERMATOSCOPIC PAINTING SOME COMMON DERMATOSES //World scientific research journal. – 2023. – Т. 16. – №. 2. – С. 107-120.
28. Иляевна Р. У. et al. MODERN TRENDS IN TREATMENT SICK MICROSPORIA //World scientific research journal. – 2023. – Т. 16. – №. 2. – С. 98-106.
29. Kholikovich E. S. et al. APPLICATION OF" BETASALIK" OINTMENT IN THE THERAPY OF CHRONIC INFLAMMATORY AND ALLERGIC DERMATOSES //Journal of new century innovations. – 2023. – Т. 31. – №. 3. – С. 56-62.
30. Мансур Т. М., Вохидов Ж. Ж. СОВРЕМЕННЫЕ МЕТОДЫ ЛЕЧЕНИЯ БОЛЕЗНИ ВИТИЛИГО //SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM. – 2023. – Т. 2. – №. 14. – С. 234-244.
31. Мансур Т. М., Вохидов Ж. Ж. СОВРЕМЕННОЙ МЕТОДЫ АЛОПЕЦИЯ ДИАГНОСТИКА И ЛЕЧЕНИЕ //SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM. – 2023. – Т. 2. – №. 14. – С. 225-233.

32. Толибов М. М. и др. ОПТИМИЗАЦИЯ К ЛЕЧЕНИЮ ТЯЖЕЛЫХ ОБОЖЖЕННЫХ БОЛЬНЫХ //SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM. – 2023. – Т. 2. – №. 14. – С. 190-199.

33. Абдуллаев Д. М., Тошев С. У., Толибов М. М. КОМПЛЕКСНЫЙ МЕТОД ЛЕЧЕНИЯ ВУЛЬГАРНЫХ УГРЕЙ //Актуальные аспекты медицинской деятельности. – 2021. – С. 254-256.

## STUDYING THE CLINICAL AND IMMUNOLOGICAL NATURE OF THE COURSE OF FORMS OF SYPHILIS

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**Abstract:** *Enzyme immunoassay (ELISA) is one of the modern serological tests for syphilis and is used to diagnose both current and past syphilitic infection. The determination of antitreponemal IgG and IgM is of crucial importance for the diagnosis of early forms of congenital syphilis, differential diagnosis of reinfection-relapses, as well as for the study of the causes of seroresistance.*

**Keywords:** *Immunoassay, syphilis.*

**Introduction:** Syphilis is characterized by a fairly high number of patients, medical and social significance, difficulties in diagnosis and treatment. In the 90s, the fifth "wave" of the syphilis epidemic began in Russia, coinciding with unfavorable socio-economic factors, the growth of prostitution, and the abolition of legislative acts on the control and prevention of sexually transmitted infections. In 1991, the incidence of syphilis in the country per 100 thousand population was 7.2, and in 1997 it was 277.3, i.e. it increased 38.5 times, reaching its peak! In subsequent years, there was a gradual decrease in the incidence, however, and in 2013 the indicator is still high - 28.9. In 1997-2013, the incidence of syphilis in the country is 4 times higher than the initial 1991. It is natural that during the period of an increase in the incidence of syphilis, its early forms – Lues I and Lues II recens (or as it is customary to say today – secondary syphilis with a prescription of up to 6 months) prevail, with a decrease – hidden as early - with a prescription of up to 2 years, and later - more than 2 years. Latent forms of infection (both early and especially late) are insidious because they are a reservoir of possible neurosyphilis, its visceral forms. The second reservoir of these



crippling forms of syphilis are patients with seroresistance. Currently, seroresistance is understood as the state of the body, which is characterized by the absence of a decrease in the titers of reagins in the RMP (microprecipitation reaction) by 4 times or more within a year after the end of full-fledged specific treatment of syphilis. What has contributed to the increase in such a contingent of people since 1995? The epidemic of syphilis in the country required the transition to outpatient treatment of patients with this infection. Due to the lack of own research, registration of foreign benzatin-benzylpenicillin (extensillin, retarpen) was carried out, which allowed this transition to be made after the publication of the "Information Letter" in 1995. This official document allowed all infectious forms of syphilis (Lues I, Lues II, Lues latens praecox) to be treated with these reparations, including pregnant women. Of course, treatment with benzatin-benzylpenicillin has played a positive role in the fight against the epidemic. However, in the future, cases of seroresistance began to appear and most often in patients with Lues II recidiva and with Lues latens praecox. In our opinion, back in that distant 1998, the treatment of the above-mentioned forms of syphilis with durant drugs should have been banned in Russia. Nowadays, it should be remembered that seroresistance is dangerous in its consequences. When performing a spinal puncture in this category of persons, changes in the cerebrospinal fluid (positive serological reactions, increased protein content, cytolysis), combined with neurological symptoms, make it possible to establish neurosyphilis in about half of the patients.

**The aim of the study** was to determine the frequency of detection of antitreponemal IgG and Ig M in seroresistant syphilis.

**Material and methods of research:** The blood sera of 25 patients (14 men and 11 women) were examined, in whom serological reactions remained positive after the end of treatment. The main age category was a group of patients aged 20 to 40 years - 12 people, 8 patients aged 40 to 50 years, 5 patients aged 50 to 60 years. The ELISA procedure was performed according to the instructions for use attached to the test system (TS), the optical density of the samples was recorded using a flatbed spectrophotometer (Multiscan, Finland).

In terms of reaction mechanism, sensitivity and specificity, ELISA is close to immunofluorescence (RIF) reactions. The participation of the same antibodies in these reactions, a close titer level, and a high frequency of matching results were noted. Therefore, the results of Ig M-ELISA were compared with DAC and RIBT

**Results:** To detect IdM in people with seroresistance, it is advisable to use test systems characterized by high sensitivity in the late stages of syphilis. It is not recommended to use test systems designed only for early diagnosis of syphilis to detect IdM in people with seroresistance. Since according to the literature, the sensitivity of such test systems in seroresistant syphilis is about 6%. The results of ELISA in the group of patients with seroresistant syphilis are in good agreement with the ideas of suppressing the expression of IdM after adequate specific therapy while maintaining the synthesis and circulation of Ig G in the blood.

It should be noted that all 25 sera were IgM negative, but IgG- positive with varying degrees of optical density (OP). 18 samples had OP above 1.0 and 7 samples had OP below 1.0 Traditional serological tests were positive.

**Conclusion:** One of the main measures aimed at preventing an increase in the incidence of syphilis is the early diagnosis of this infection. Due to the development of more sensitive, specific and less time-consuming serological methods, the use of ELISA has become possible, as well as its use for confirmation in patients with seroresistance in syphilis.

## LITERATURE

1. Islamov N. H., Yusupov M. M., Oripov R. A. CHEKLANGAN SKLERODERMANI DAVOLASHNING SAMARALI //Educational Research in Universal Sciences. – 2023. – T. 2. – №. 14. – C. 324-329.
2. Mardonovich N. R. et al. Epidemiological Analysis of Trichofitia Disease in Samarkand Region //Journal of Survey in Fisheries Sciences. – 2023. – T. 10. – №. 1S. – C. 4981-4994.

3. Anvarovich O. R., Ravshanovich K. K. A New View on the Course of Sexually Transmitted Diseases //Web of Semantic: Universal Journal on Innovative Education. – 2023. – Т. 2. – №. 2. – С. 189-193.
4. Anvarovich O. R., Javlonovna P. A. Takrakor in the Treatment of Itching Dermatitis //Web of Semantic: Universal Journal on Innovative Education. – 2023. – Т. 2. – №. 2. – С. 184-188.
5. Anvarovich O. R. Management of Sick Children with Adopic Dermatitis //Web of Semantic: Universal Journal on Innovative Education. – 2023. – Т. 2. – №. 2. – С. 179-183.
6. Oripov R. A. LABORATORY PARAMETERS IN CHILDREN WITH VERIFIED MENINGITIS //Modern Scientific Research International Scientific Journal. – 2023. – Т. 1. – №. 7. – С. 162-168.
7. Davlyatovna K. G., Anvarovich O. R., Xikmatovich I. N. UROGENITAL XLAMIDIYADA MIRAMISTINNING SAMARADORLIGINI BAHOLASH //Нововведения Современного Научного Развития в Эпоху Глобализации: Проблемы и Решения. – 2023. – Т. 1. – №. 4. – С. 53-59.
8. Kurbonalievich A. S. et al. UROGENITAL CHLAMYDIOSIS IS A CAUSE OF STERILITY AND CHRONIC PROSTATITIS IN MEN //Web of Scholars: Multidimensional Research Journal. – 2022. – Т. 1. – №. 6. – С. 306-310.
9. Anvarovich O. R. et al. ETIOPATHOGENESIS AND CLINICAL COURSE SPECIFIC CHARACTERISTICS OF NEURODERMITIS DISEASE //Web of Scholars: Multidimensional Research Journal. – 2022. – Т. 1. – №. 6. – С. 276-280.
10. Bakhodirovich T. I. et al. COMBINED IMMUNOTHERAPY IN THE TREATMENT OF CANDIDIASIAN INFECTIONS OF THE URINARY ORGANS //Web of Scholars: Multidimensional Research Journal. – 2022. – Т. 1. – №. 6. – С. 257-263.
11. Anvarovich O. R. ATOPIK DERMATIT BILAN BIRGA KECHADIGAN DIABET KASALLIGINI DAVOLASH SAMARADORLIGINI BAHOLASH

//BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI.  
– 2022. – С. 242-244.

12. Anvarovich O. R. APPLICATION OF VIFIRON FOR LOCAL TREATMENT OF HERPIS VIRUS //Евразийский журнал медицинских и естественных наук. – 2022. – Т. 2. – №. 3. – С. 30-32.

13. Kurbonalievich A. S. et al. Experience of the Combination of Tiflox and Immunomax in the Treatment of Trichomoniasis Combined with a Bacterial Process //Annals of the Romanian Society for Cell Biology. – 2021. – С. 2376-2380.

14. Kurbonalievich A. S. et al. Some Features of Psoriasis Therapy in Stationary //European Scholar Journal. – 2021. – Т. 2. – №. 3. – С. 248-250.

15. Kurbonalievich A. S. et al. Careful Attention To The History Of Chronic Urticaria Is One Of The Important Factors Of Productive Therapy //The American Journal of Medical Sciences and Pharmaceutical Research. – 2021. – Т. 3. – №. 02. – С. 55-58.

16. Kurbonalievich A. S. et al. Features Of The Use Of Antioxidant Drugs In The Treatment Of Psoriatic Disease //The American Journal of Medical Sciences and Pharmaceutical Research. – 2021. – Т. 3. – №. 02. – С. 50-54.

17. Орипов Р. А. и др. ОСОБЕННОСТИ ПРИМЕНЕНИЕ АНТИОКСИДАНТНЫХ ПРЕПАРАТОВ В ЛЕЧЕНИИ НЕЙРОДЕРМИТА. – 2021.

18. Ахмедов Ш. К. и др. НЕКОТОРЫЕ ОСОБЕННОСТИ ТАКТИКИ ПРОДУКТИВНОГО ЛЕЧЕНИЯ ХРОНИЧЕСКОЙ КРАПИВНИЦЫ. – 2021.

19. Salamova L. A. et al. Cutaneous leishmaniasis and concomitant tissue helminthiasis //ResearchJet Journal of Analysis and Inventions. – 2021. – Т. 2. – №. 03. – С. 64-72.

20. Ачилова О. Д. и др. Эхинококкоз касаллигини иммуноташхислашда антигенларни қўллашнинг тамоиллари //Общество и инновации. – 2020. – Т. 1. – №. 1/s. – С. 598-603.

21. Tolibov M. M., qizi Buronova F. Z. MAHALLIY OZON TERAPIYASINI QO‘LLAGAN HOLDA KOMPLEKS DAVOLASH FONIDA YOSH ERKAKLARDA SURUNKALI URETROGEN PROSTATIT (CUP) KECHISHINI O‘RGANISH //Educational Research in Universal Sciences. – 2024. – T. 3. – №. 1. – C. 417-421.
22. Tolibov M. M., Shodmonova M. A. BOLALARDA ATOPIK DERMATIT (AD) PATOGENEZIDA GENETIK OMILLARNING ROLINI BAHOLASH VA IMMUNOLOGIK PARAMETRLARGA QARAB ANIQLANGAN POLIMORFIZMLARNING PROGNOZIK AHAMIYATINI ANIQLASH //Educational Research in Universal Sciences. – 2024. – T. 3. – №. 1. – C. 406-410.
23. Tolibov M. M. et al. ATOPIK DERMATITNI DAVOLASHDA LAZER TERAPIYASINING SAMARADORLIGI //Educational Research in Universal Sciences. – 2024. – T. 3. – №. 1. – C. 286-289.
24. Utayev A. J., Tolibov M. M., Axmedova M. M. MANAGEMENT APPROACHES FOR CHRONIC URETHROGENIC PROSTATITIS //Modern Scientific Research International Scientific Journal. – 2024. – T. 2. – №. 1. – C. 151-156.
25. Makhmudovich T. M. ATOPIC DERMATITIS INCIDENT LEVEL, DIAGNOSTIC CRITERIA AND PROGNOSTIC IMPORTANCE //JOURNAL OF APPLIED MEDICAL SCIENCES. – 2023. – T. 6. – №. 4. – C. 158-168.
26. Толибов М. М. СОВРЕМЕННОЕ СОСТОЯНИЕ ПРОБЛЕМ ЭПИДЕМИОЛОГИИ, МИКРОБИОЛОГИИ И ТЕРАПИИ АКНЕ (ОБЗОР ЛИТЕРАТУРЫ) //SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM. – 2023. – T. 2. – №. 14. – C. 215-224.
27. Ilyayevna P. U. et al. DERMATOSCOPIC PAINTING SOME COMMON DERMATOSES //World scientific research journal. – 2023. – T. 16. – №. 2. – C. 107-120.
28. Ilyayevna P. U. et al. MODERN TRENDS IN TREATMENT SICK MICROSPORIA //World scientific research journal. – 2023. – T. 16. – №. 2. – C. 98-106.

29. Kholikovich E. S. et al. APPLICATION OF" BETASALIK" OINTMENT IN THE THERAPY OF CHRONIC INFLAMMATORY AND ALLERGIC DERMATOSES //Journal of new century innovations. – 2023. – T. 31. – №. 3. – С. 56-62.

## PYODERMA ASSOCIATED WITH ALLERGODERMATOSIS, ASSESSMENT OF THE QUALITY OF THERAPY

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**Abstract:** *The study analyzes modern concepts of etiology, pathogenesis, and treatment of vulgar acne associated with allergic skin diseases. Particular attention was paid to the central role of local manifestations leading to the appearance of acne in a cascade of hormonal, immunological and microbiological changes. As described in the treatment of acne, evidence-based medical approaches are used to determine the most effective treatment.*

**Keywords:** *Allergic diseases, vulgar acne, therapy, effectiveness of treatment.*

**Introduction:** The incidence of allergies in the world is increasing among adults and children. According to world data, 30-50% of the population suffers from allergic diseases. In fact, this is the epidemic of the 21st century. Only in Europe more than 150 million people suffer from allergic diseases, of which half a billion - allergic rhinitis, more than 300 million - bronchial asthma. Acne vulgaris (pimples, acne) is one of the



most common diseases that affects 90-95% of the world's population. The highest incidence was registered in the period from 12 to 25 years. However, in approximately 7% of patients, late acne (adult acne) may occur after 40 years of age. Most patients with a severe course of the disease develop irreversible anti-inflammatory skin changes that require long-term and complex treatment, no less than the appearance of acne in patients. The presence of cosmetic defects negatively affects the mental and emotional state of patients, reduces self-esteem, leads to depressive disorders, leads to social disorders. In recent years, some progress has been made in the study of the pathogenesis of acne. According to modern concepts, the appearance of acne occurs against the background of interrelated pathogenetic mechanisms. The most important of them are the violation of keratinization processes, pathological follicular hyperkeratosis, lipid imbalance and hyperproduction of sebum along with the proliferation of microorganisms, among which *Propionibacterium acnes* plays a key role. In the pathogenesis of acne, immune diseases are important, characterized by the activation of cell-mediated reactions of the leukocyte system and the functional state of the humoral immunity. The development of appropriate therapy is determined by the pathogenetic mechanisms of acne and includes external and systemic drugs (antibiotics, synthetic retinoids, antiandrogenic and immunotropic agents), physiotherapy, peeling, etc. However, long-term treatment is often required, which can lead to serious side effects, complications and resistance to the drugs used. medicines. Given these problems, it seems interesting to develop an integrated approach to the treatment of the most common forms of acne using local antibacterial and anti-inflammatory drugs with specific protective mechanisms, and antidepressants that prevent the development of resistance, promote recovery with a clear vegetative stabilizing effect.

**Objective:** To determine the effectiveness of a complex method for the treatment of acne vulgaris associated with allergic skin diseases.

**Materials and methods.** To carry out our work, 52 patients with acne vulgaris were examined, who were on inpatient treatment and received outpatient treatment in

the Samarkand Regional Hospital. The mean age of the observed patients was  $18.27 \pm 12.6$  years. 41 (73%) boys and 11 (27%) girls were examined. The duration of the disease in patients ranged from 1 to 3 years. Criteria for inclusion of patients in the observation group included: the presence of clinical evidence of acne vulgaris, the patient's informed consent to participate in the study with clinical and laboratory studies of therapy, the application of treatment recommendations

The exclusion criteria for patients from the main group were: complex forms of acne vulgaris, malignant neoplasms, chronic diseases of the internal organs of an infectious-allergic nature, a clear diagnosis of hepatitis, including an increased risk; The last treatment for acne vulgaris was less than 1 month ago, as well as a violation of the treatment regimen.

**Results and discussion:** All examined patients were divided into 2 groups, main and control; the main group included patients who received standard treatment for acne vulgaris.

The control group included patients who received drugs: lacto-ji 1 capsule 3 times a day for 20 days, Trikhopol 1 tablet 3 times a day for 10 days, Fukarsin for burning 1 time a day at night, before going to bed. Ointment Mupiroban 2% is rubbed for 15 days and a solution of ziniride 2 times a week.

Patients were hospitalized for 10 days, after which patients continued outpatient treatment for 1 month, with outpatient treatment, patients visited the attending physician every 10 days to evaluate the effectiveness of treatment.

To determine the effectiveness of treatment, the following criteria were used: a positive effect of therapy at the beginning of treatment, the timing of sowing bacterial pathology in the foci, the timing of clinical recovery.

In the main group, positive dynamics was noted in 4 patients on the 10th day, treatment was changed on the 5th day, positive dynamics was noted in 15 patients on the 20th day of treatment, complete clinical recovery was noted in 2 patients on the 30th day. day. treatment, positive dynamics was noted in 3 patients. 12 Clinical recovery was noted in 12 patients. On the 40th day of treatment, 16 out of 26 patients

had a complete clinical recovery, and 10 continued treatment. There were no visible changes in patients, as a result

In the control group of 26 patients, 10 patients showed positive dynamics on the 10th day, on the 20th day of treatment, positive dynamics was noted in another 20 patients, complete clinical recovery in 15 patients, after 30 days of treatment in 26 patients, complete clinical recovery in 24 patients, 2 patients continued treatment. There were no visible changes in patients, as a result

Conclusions: Thus, the proposed treatment complex turned out to be more effective in the treatment of acne vulgaris. A positive effect was observed in all 26 observed cases, while this method increased the activity of rapid recovery and reduced complications (post-acne).

### Literate

1. Kholikova Gulnoz Asatovna. Kodirova Markhabo Miyassarovna. Frequency of functional constipation in children of different ages. Журнал гепато-гастроэнтерологических исследований. том 3. №3 2022-08-01. Стр 38-40.

2. М.М Кодирова, Г.А Холикова. Samarqand hududida bolalarda miokarditning asosiy klinik simptomlarini uchrashi. Журнал гепато-гастроэнтерологических исследований. том 3.. №3 2022-08-01. Стр 57-60.

1- Жалилов А. Х. СОСТОЯНИЕ ПЕРИФЕРИЧЕСКОГО ЭРИТРОНА В КЛИНИКЕ ОСТРОЙ ПНЕВМОНИИ НА ФОНЕ ЖЕЛЕЗОДЕФИЦИТНОЙ АНЕМИИ //Gospodarka i Innowacje. – 2023. – Т. 36. – С. 160-167.

2-Qobilov E. E. et al. ANAMNEZIDA BROXOBSTRUKTIV SINDROMNI O‘TKAZGAN BOLALARDA BRONXIAL ASTMA KASALLIGINING BOSHQARILADIGAN PREDIKTORLARI //Scientific Impulse. – 2022. – Т. 1. – №. 2. – С. 428-434.

3- Уралов Ш. М. и др. Методы лечения острого стенозирующего ларинготрахеита у детей на современном этапе //Scientific impulse. – 2022. – Т. 1. – №. 2. – С. 19-28.

- 4- Hikmatovich I. N., Xolmatovich J. A., Axtamovna A. F. Applications of Elidel for Lichen Plane //Texas Journal of Medical Science. – 2022. – Т. 8. – С. 113-115.
- 5- Ачилова Ф. А., Жалилов А. Х. ДАННЫЕ ЭХОКАРДИОГРАФИИ ПРИ МАЛЫХ АНОМАЛИЙ СЕРДЦА У ДЕТЕЙ //E Conference Zone. – 2022. – С. 136-140.
- 6- Жалилов А. Х., Ачилова Ф. А. ЖЕЛЕЗОДЕФИЦИТНАЯ АНЕМИЯ У ДЕТЕЙ И ЕЁ ЛЕЧЕНИЕ //E Conference Zone. – 2022. – С. 123-127.
- 7- Kh J. A., Sh M. U., Achilova F. A. The state of the erythron system in acute pneumonia in children. – 2022.
- 8- Hikmatovich I. N., Temirovich E. R., Xolmatovich J. A. BOLALAR DERMATOZINI DAVOLASHDA MAHALLIY TERAPIYA SAMARALIGINI BAHOLASH //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – С. 352-354.
- 9- Hikmatovich I. N., Xolmatovich J. A., Axtamovna A. F. O‘SMIRLARDAGI VULGAR ACNE KASSALIGINI KOMPLEKS DAVOLASHNI ISHLAB CHIQISH VA SAMARADORLIKNI ANIQLASH //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – С. 323-326.
- 10- Hikmatovich I. N., Temirovich E. R., Xolmatovich J. A. HERPIS VIRUSINI MAHALLIY DAVOLASH UCHUN VIFIRONNI QO‘LLASH //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – С. 349-351.
- 11- Hikmatovich I. N., Xolmatovich J. A., Axtamovna A. F. ATOPIK DERMATITLI BEMORLARNI PROGRESSIV BOSQICHDA MAHALLIY DAVOLASH SAMARADORLIGINI BAHOLASH //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – С. 259-263.
- 12- Qobilov E. E. et al. ANAMNEZIDA BROXOBSTRUKTIV SINDROMNI O‘TKAZGAN BOLALARDA BRONXIAL ASTMA KASALLIGINING BOSHQARILADIGAN PREDIKTORLARI //Scientific Impulse. – 2022. – Т. 1. – №. 2. – С. 428-434.

- 13- Уралов Ш. М. и др. Методы лечения острого стенозирующего ларинготрахеита у детей на современном этапе //Scientific impulse. – 2022. – Т. 1. – №. 2. – С. 19-28.
- 14- Hikmatovich I. N., Xolmatovich J. A., Axtamovna A. F. Applications of Elidel for Lichen Plane //Texas Journal of Medical Science. – 2022. – Т. 8. – С. 113-115.
- 15- Ачилова Ф. А., Жалилов А. Х. ДАННЫЕ ЭХОКАРДИОГРАФИИ ПРИ МАЛЫХ АНОМАЛИЙ СЕРДЦА У ДЕТЕЙ //E Conference Zone. – 2022. – С. 136-140.
- 16- Жалилов А. Х., Ачилова Ф. А. ЖЕЛЕЗОДЕФИЦИТНАЯ АНЕМИЯ У ДЕТЕЙ И ЕЁ ЛЕЧЕНИЕ //E Conference Zone. – 2022. – С. 123-127.
- 17- Kh J. A., Sh M. U., Achilova F. A. The state of the erythron system in acute pneumonia in children. – 2022
- 18- Islamov N. H., Jalilov A. X., Achilova F. A. IJTIMOIIY-GIGIENIK TURSHIY SHARTLARNING O ‘QUVCHILAR SALOMATLIGIGA TA’SIRI //Educational Research in Universal Sciences. – 2023. – Т. 2. – №. 14. – С. 314-318.
- 19- Islamov N. H. et al. PRINCIPLES OF TREATMENT OF LARYNGOTRACHEITIS IN CHILDREN //Modern Scientific Research International Scientific Journal. – 2023. – Т. 1. – №. 7. – С. 136-142.
- 20- Islamov N. H., Jalilov A. X., Achilova F. A. DEVELOPMENT OF PAPILLOMAVIRUS INFECTION IN MEN //Modern Scientific Research International Scientific Journal. – 2023. – Т. 1. – №. 7. – С. 128-135.
- 21- Ачилова Ф., Ибатова Ш., Абдукадилова А. ЕХОКАРДИОГРАФИЯ ВО‘УИЧА БОЛАЛАРДА КИЧИК YURAK АНОМАЛИЯЛАРИНИНГ ТАРҚАЛИШИ //Международный журнал научной педиатрии. – 2022. – №. 5. – С. 11-15
- 22- Пулатов Х. Х. и др. Влияние экспериментального сахарного диабета на надпочечники : дис. – Ўзбекистон, Самарқанд, 2022.

23- Каримова Н. А. и др. НАРУШЕНИЕ ФИЗИЧЕСКОГО РАЗВИТИЯ У ПОДРОСТКОВ И ОСЛОЖНЕНИЯ РЕПРОДУКТИВНОЙ ПАТОЛОГИИ //Новый день в медицине. – 2021. – №. 1. – С. 199-202.

24- Hikmatovich I. N., Temirovich E. R., Muradovich Y. M. O‘SMIRLARDA YUZAKI PYODERMANI DAVOLASHDA TOPIKAL TERAPIYA //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – С. 355-358.

25- Oblakulovich K. S. et al. The Thymus gland (Thymus) aspects in children (review of literature) //Central Asian Journal of Medical and Natural Science. – 2022. – Т. 3. – №. 2. – С. 9-16.

26- Tolibov M. M., qizi Buronova F. Z. MAHALLIY OZON TERAPIYASINI QO ‘LLAGAN HOLDA KOMPLEKS DAVOLASH FONIDA YOSH ERKAKLARDA SURUNKALI URETROGEN PROSTATIT (CUP) KECHISHINI O ‘RGANISH //Educational Research in Universal Sciences. – 2024. – Т. 3. – №. 1. – С. 417-421.

27- Tolibov M. M., Shodmonova M. A. BOLALARDA ATOPIK DERMATIT (AD) PATOGENEZIDA GENETIK OMILLARNING ROLINI BAHOLASH VA IMMUNOLOGIK PARAMETRLARGA QARAB ANIQLANGAN POLIMORFIZMLARNING PROGNOZIK AHAMIYATINI ANIQLASH //Educational Research in Universal Sciences. – 2024. – Т. 3. – №. 1. – С. 406-410.

28- Tolibov M. M. et al. ATOPIK DERMATITNI DAVOLASHDA LAZER TERAPIYASINING SAMARADORLIGI //Educational Research in Universal Sciences. – 2024. – Т. 3. – №. 1. – С. 286-289.

29- Utayev A. J., Tolibov M. M., Axmedova M. M. MANAGEMENT APPROACHES FOR CHRONIC URETHROGENIC PROSTATITIS //Modern Scientific Research International Scientific Journal. – 2024. – Т. 2. – №. 1. – С. 151-156.

30- Makhmudovich T. M. ATOPIC DERMATITIS INCIDENT LEVEL, DIAGNOSTIC CRITERIA AND PROGNOSTIC IMPORTANCE //JOURNAL OF APPLIED MEDICAL SCIENCES. – 2023. – Т. 6. – №. 4. – С. 158-168.

31- Толибов М. М. СОВРЕМЕННОЕ СОСТОЯНИЕ ПРОБЛЕМ ЭПИДЕМИОЛОГИИ, МИКРОБИОЛОГИИ И ТЕРАПИИ АКНЕ (ОБЗОР ЛИТЕРАТУРЫ) //SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM. – 2023. – Т. 2. – №. 14. – С. 215-224.

32- Пыяевна P. U. et al. DERMATOSCOPIC PAINTING SOME COMMON DERMATOSES //World scientific research journal. – 2023. – Т. 16. – №. 2. – С. 107-120.

33- Пыяевна P. U. et al. MODERN TRENDS IN TREATMENT SICK MICROSPORIA //World scientific research journal. – 2023. – Т. 16. – №. 2. – С. 98-106.

34- Kholikovich E. S. et al. APPLICATION OF" BETASALIK" OINTMENT IN THE THERAPY OF CHRONIC INFLAMMATORY AND ALLERGIC DERMATOSES //Journal of new century innovations. – 2023. – Т. 31. – №. 3. – С. 56-62.

35- Мансур Т. М., Вохидов Ж. Ж. СОВРЕМЕННЫЕ МЕТОДЫ ЛЕЧЕНИЯ БОЛЕЗНИ ВИТИЛИГО //SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM. – 2023. – Т. 2. – №. 14. – С. 234-244.



## TO EVALUATE THE PATHOGENESIS OF ATOPIC DERMATITIS: THE ROLE OF GENETIC FACTORS

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***Annotation:** This article attempts to reveal the main reasons for the role of genetic factors in the pathogenesis of atopic dermatitis (AD) in children and to determine the prognostic significance of the identified polymorphisms, depending on immunological parameters. To perform scientific work, the author conducted (PCR) polymorphic variants of the IL-4 gene: intron 3 in the VNTR region and snp variants of C/T-590 in children. The problem in question is still little studied, therefore, requires more thorough research.*

***Keywords:** genetic factors, atopic dermatitis, polymorphism*

**Introduction:** Atopic dermatitis (AtD, atopic eczema, atopic eczema/dermatitis syndrome) — chronic allergic dermatitis; a disease that develops in individuals with a genetic predisposition to atopias, has a relapsing course, age-related features of clinical manifestations. It is characterized by exudative and (or) lichenoid rashes, increased serum IgE levels and hypersensitivity to specific (allergenic) and nonspecific stimuli. It has a clear seasonal dependence: in winter - exacerbations or relapses, in summer - partial or complete remissions. The prevalence of AD among developed countries is 10-20%. The manifestation of AD symptoms in children is observed at the age of 6 months in 60% of cases, up to 1 year in 75%, up to 7 years in 80-90%. Over the past decades, there has been a significant increase in the incidence of AD, its course is becoming more complicated, and the outcome is aggravated. In the 20th century, the connection between AtD, pollinosis and bronchial asthma was confirmed, which was designated by the term "atopic triad" [2]. The combination of AD with bronchial asthma is observed in 34% of cases, with allergic rhinitis - in 25%, with hay fever - in 8%. AD may be the debut of an "allergic march", when further atopic diseases develop in such patients: food allergy, bronchial asthma, allergic rhinitis. AD associated with food allergy accelerates the progression of the "allergic march".

**Aim:** To evaluate the role of genetic factors in the pathogenesis of atopic dermatitis (AD) in children and to determine the prognostic significance of the identified polymorphisms, depending on immunological parameters.

**Methods and materials:** Using polymerase chain reaction (PCR), polymorphic variants of the IL-4 gene were determined: intron 3 in the VNTR region and snp variants of C/T-590 in children with AD and in the control group. In addition, for the listed groups, the IL-4 and IgE levels in the blood serum were determined using the "sandwich" variant of enzyme-linked immunosorbent assay (ELISA) using monoclonal antibodies.

**Results:** In 40 children with moderate and severe course of atopic dermatitis (> 40 points according to SCORAD), whose average age was 12 years at the time of

hospitalization (girls -13 years and boys 11 years), polymorphisms were determined by PCR diagnostics C590 T and VNTR intron 3 (where RP1 allele of 183 bp and RP2 of 253 bp). The C590 allele was detected only in 32.5% (13), while the mutant -590 T allele was found in 12.5% (5) and in the heterozygous C590 T variant in 55% (22). The RP1 allele was determined in 40% (16) of patients, while the mutant RP2 variant in 17.5% (7) and the heterozygous RP1/RP2 variant in 42.5% (17). These results were compared with those obtained in the comparison group (50 healthy girls, mean age 16 years). The mutant allele -590 T was found only in 2% (1) and in its heterozygous C590 T variant in 10% (5). The mutant RP2-in the control group was only in 6% (3) and its heterozygous variant RP1/RP2 was in 10% (5). According to ELISA data, in patients with atopic dermatitis, the IL-4 index (pg/ml) averaged  $1.936 \pm 0.20$  (Me= 2.028, R= 5.536), which differed from the control group: the average was  $0.88 \pm 0.088$  (Me= 0.961, R= 1.932), statistically significant differences with control  $p < 0.05$ . The content of IgE (IU/ml) in the blood serum was significantly higher in patients (mean -  $731.41 \pm 61.09$ , Me= 724.9, R= 1365.8,  $p < 0.05$ ) in comparison with the group of relatively healthy children (mean -  $188.5 \pm 28.63$ , Me= 112.4, R=913.326,  $p < 0.05$ ). When comparing the average values of immunological parameters with the presence of a certain polymorphism, the following data were obtained: 1) in patients, the variant C590-IL-4 = 0.696, IgE = 647.46, -590 T-IL-4 = 2.575, IgE = 802, 86, C590 T-IL-4 = 2.523, IgE = 764.81; 2) in relatively healthy C590-IL-4 = 0.765, IgE = 161.88, -590 T-IL-4 = 1.931, IgE = 467.8, C590 T-IL-4 = 1.5348, IgE = 366, 89, and according to VNTR intron 3 polymorphism: 1) patients with RP1 variant-IL-4 = 0.88, IgE = 660.78, RP2 variant- IL-4 = 2.434, IgE = 686.62, RP1/RP2- IL-4 = 2.723, IgE = 695.49; 2) relatively healthy with RP1 variant - IL-4 = 0.781, IgE = 163.73, RP2 variant - IL-4 = 1.782, IgE = 435.86, RP1/RP2- IL-4 = 0.852, IgE = 249, 1.

**Conclusions:** The presented polymorphisms of the IL-4 gene can be prognostically significant, because mutant variants are more common in sick children in a homo - or heterozygous state, which is confirmed by immunological parameters of

blood serum, because even in relatively healthy children in the presence of a mutated allele, the concentration of IL-4 and IgE increases. To assess the prognostic significance of the manifestation and course of atopic dermatitis and to introduce these diagnostic methods into routine practice, it is necessary to continue research on large samples.

### LITERATURE:

1. Iskandarovna K. M. SIFILISNING IMMUNOASSAY SHAKLLARI //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – С. 534-536.
2. Iskandarovna K. M., Dilshodovna A. D., Adxamovna A. A. Impact of Socio-Hygienic Conditions of Life on the Health of Students //Central Asian Journal of Medical and Natural Science. – 2022. – Т. 3. – №. 5. – С. 644-646.
3. Iskandarovna K. M. et al. Comprehensive Assessment of the Levels of Somatic Health and Disturbances of Adaptation Reserves in Medical Students //Central Asian Journal of Medical and Natural Science. – 2022. – Т. 3. – №. 5. – С. 641-643.
4. Iskandarovna K. M., Alamovich K. A., Rabbimovich N. A. Treatment of Urethrogenic Prostatitis Associated with Chlamydia Infection //TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIIY JURNALI. – 2021. – Т. 1. – №. 5. – С. 44-46.
5. Iskandarovna K. M., Buribaevna I. S., Azamovna A. N. Immunoassay Forms of Syphilis //TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIIY JURNALI. – 2021. – Т. 1. – №. 5. – С. 47-49.
6. Ахмедова М. М., Абдуллаев Х. Д., Камолова М. И. ОЦЕНКА ЭФФЕКТИВНОСТИ МЕТОДОВ ЛЕЧЕНИЯ ОНИХОМИКОЗОВ У ВЗРОСЛЫХ //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – Т. 2. – №. 3. – С. 186-190.
7. Абдуллаев Д. М., Абдуллаев Х. Д., Камолова М. И. ОПЫТ ПРИМЕНЕНИЯ КРЕМАТЕРБИЗИЛ ПРИ ЛЕЧЕНИИ МИКОЗОВ

//BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI.  
– 2022. – T. 2. – №. 3. – C. 181-185.

8. Davlatovich A. X. VAGINAL TRIXOMONADLAR SHTAMMASINI TRIXOPOLGA VA XIMOTRIPSIN BILAN BILAN SEZGICHLIGINI ANIQLASH //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI.  
– 2022. – C. 645-647.

9. Davlatovich A. X., Orifovich S. D., Baxtiyorovich A. S. Studying the Relationship of Local Immune Status and the Course of Burn Disease //Central Asian Journal of Medical and Natural Science. – 2022. – T. 3. – №. 5. – C. 679-682.

10. Xolmurodovich D. J., Umidovich N. T., Davlatovich A. X. CLINIC COURSE OF NONSPECIFIC PNEUMONIA //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – C. 510-513.

11. Абдуллаев Х. Д. и др. ЛАЗЕР В ЛЕЧЕНИИ ВИТИЛИГО //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI.  
– 2022. – C. 495-500.

12. Hikmatovich I. N. et al. The use of Fungite in the Local Treatment of Genital Herpes //International Journal of Innovative Analyses and Emerging Technology. – 2021. – T. 1. – №. 5. – C. 231-232.

13. Davlatovich A. X., O'gli A. B. X., O'gli I. A. S. BOLALARDA GENITAL GERPESNI DAVOLASH SAMARADORLIGINI BAHOLASH //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI.  
– 2022. – C. 367-369.

14. Xolmurodovich D. J., Orifovich R. S., Davlatovich A. X. FEATURES OF THE MICROELEMENT STATUS FOR THE DEVELOPMENT OF ATOPIC DERMATITIS IN CHILDREN //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – C. 447-450.

15. Davlatovich A. X. DETERMINATION OF GENE ACTIVITY IN VITILIGO PATIENTS //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – C. 451-454.

16. Davlatovich A. X. et al. EVALUATION OF THE GENERAL SOMATIC STATUS OF PATIENTS WITH VITILIGO BASED ON THE DETERMINATION OF THE CONTENT OF NATURAL ANTIBODIES TO VARIOUS ORGANIS AND TISSUES OF THE BODY //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – C. 472-476.

17. Davlatovich A. X. et al. USING IMMUNOMAX AND 0.1% TACROLIMUS OINTMENT IN THE TREATMENT OF VITILIGO //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – C. 559-562.

## EXAMINING GENETIC POLYMORPHISM IN INDIVIDUALS WITH VIRAL IMMUNITY

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***Annotation:** In the world, the number of patients with this disease exceeds 1% of the total population. In 70% of cases, the disease begins at the age of 10-25 years, children under 10 years of age, including newborns and infants, account for approximately 25% of all patients with vitiligo. To analyze the genetic structure in patients with vitiligo and determine the activity of genes: DDS and GNB3, assessing their possible role in the pathogenesis of the disease clinic of skin and venereal diseases of the regional center of the city of Samarkand in the period from 2019 to 2021. To compare the results of laboratory studies, a group of 10 healthy donors was examined. Analysis of the clinical material was carried out on the basis of the history*



*of life and disease, assessment of the general condition and local status of the patient. In each patient, the clinical form of the disease was determined according to the classification of vitiligo. As a result of our genotyping of patients with vitiligo, an association of haplotypes of the SCVZ gene encoding the beta subunit of the C-protein with vitiligo was revealed. Considering that the gs 5443 polymorphism modulates the immune response of T-lymphocytes and is associated with type II diabetes, this makes possible its involvement in the autoimmune component of the pathogenesis of vitiligo.*

**Keywords:** *vitiligo, polymorphism*

**Introduction:** Vitiligo is characterized by the sudden appearance of depigmented spots due to a violation of the secretory function of melanocytes or their death, develops in individuals with a genetic predisposition, is accompanied by pronounced dysregulatory changes in cell-mediated reactions of the immune system, autonomic imbalance with a predominance of sympathetic tone and serious social maladjustment due to personal characteristics and external social factors. Vitiligo is a common dermatosis. In the world, the number of patients with this disease exceeds 1% of the total population. In 70% of cases, the disease begins at the age of 10–25 years; children under 10 years of age, including newborns and infants, account for approximately 25% of all patients with vitiligo [1]. Vitiligo can occur at any age, last indefinitely, spontaneous restoration of normal skin color is rare. The reasons for the appearance of depigmented lesions are not known. It is not clear enough as a result of what disorders melanin synthesis abruptly stops and melanocytes die. Various endogenous and exogenous factors can have a direct and indirect damaging effect on melanocytes. Among external factors, infectious and toxic agents, excessive ultraviolet radiation, and stress are of the greatest importance. For many decades, vitiligo has been associated with autoimmune thyroiditis, rheumatoid arthritis, lupus erythematosus, atopic dermatitis, liver diseases of infectious or toxic origin, helminthic invasion, and a number of congenital syndromes [2]. However, the incidence of vitiligo in these patients is not higher than in the general population. A number of authors [3, 4],

summing up the results of many years of research, believe that patients with vitiligo in most cases do not have any severe or chronic concomitant diseases, and the therapy of functional disorders of the digestive system, vegetovascular dystonia, identified in 28% of patients, did not affect the result of repigmentation. Many researchers believe [5, 6] that vitiligo is a serious cosmetic defect that occurs in individuals with a genetic predisposition and, in most cases, who have experienced emotional disorders. Only in 4-7% of patients vitiligo is combined with autoimmune thyroiditis. In modern genetic studies, the relationship between the occurrence of vitiligo and various aspects of inheritance has been demonstrated. Among sporadic cases of vitiligo in the European population, the average age of onset is 24.2 years, while in families with multiple cases of the disease, the average age is 21.5 years (statistically significant difference) [7]. Earlier onset of the disease in "family" cases and the risk of disease in distant relatives is a typical characteristic of polygenic disease. About 20% of patients with vitiligo have at least one blood relative with a similar disease. Formal genetic segregation analysis of vitiligo determines the existence of many loci, disorders in which form a predisposition to vitiligo. However, key genes responsible for the manifestation, progressive course or predisposition to this disease have not been found. In vitiligo, a decrease in the antioxidant potential was found, leading to an active damaging effect of free radicals on melanocytes and the accumulation of lipid peroxidation products [8, 9]. Later, it turned out that free radicals have a damaging effect on various cells involved in various types of inflammatory reactions, and antioxidant defense disorders are not the main mechanisms of depigmentation in vitiligo. The theory of violations of the immune mechanisms of regulation is the most reasonable. With a long course and a widespread pathological process, changes in the subpopulation composition of T-lymphocytes are observed. At the same time, especially at the initial stages of the disease, the levels of activation receptors of lymphocytes increase, reflecting the degree of activation of immunocompetent cells [10]. Currently, most researchers believe that the leading role in the development of autoimmune diseases belongs to cell-mediated reactions, in which there is a pronounced imbalance of cytokines. In vitiligo, a decrease

in the activity of regulatory T-lymphocytes is detected, which is confirmed by a decrease in the amount of transforming growth factor- $\beta$  (TGF- $\beta$ ) and interleukin-10 (IL-10) in the blood serum of patients [11]. Treatment of vitiligo is a difficult task. Since the causes of its occurrence are unknown, in most cases the disease develops against the background of complete physical well-being. It is proposed to use mainly topical steroids and/or immunomodulators with a lesion area of up to 20%, as well as long-term phototherapy [12, 13]. Complex therapy includes enzyme preparations, hepatoprotectors, vitamins and microelements (zinc, copper) [14, 15]. A number of recommendations contain information on the use of sedatives and antidepressants. The aim of this study was to study the clinical features of the course of vitiligo and the effectiveness of complex therapy, including the immunomodulatory component thymogen and externally 1% pimecrolimus, and the correction of affective disorders in patients with various forms of vitiligo using the antidepressant drug agomelatine.

**Aim:** To analyze the genetic structure in patients with vitiligo and determine the activity of genes: DDS and GNB3, assessing their possible role in the pathogenesis of the disease.

**Materials and Methods:** This study included 53 patients with various forms and stages of vitiligo aged 12 to 59 years, who were on outpatient treatment at the clinic for skin and venereal diseases of the regional center of the city of Samarkand in the period from 2019 to 2021. To compare the results of laboratory studies, a group of 10 healthy donors was examined. Analysis of the clinical material was carried out on the basis of the history of life and disease, assessment of the general condition and local status of the patient. In each patient, the clinical form of the disease was determined according to the classification of vitiligo. The clinical examination included a general examination of the patient's skin, an examination using a fluorescent lamp, and measuring the area of depigmented lesions using a ruler. The areas of each lesion were summarized and evaluated as a percentage relative to the body surface area. All patients underwent a clinical examination, including examination using a fluorescent lamp,

history taking, determination of the area of lesions. Laboratory and instrumental studies included:

- Clinical blood test;
- Genotyping of single nucleotide polymorphisms (SNP genotyping) by pyrosequencing.

Two genes were included as “candidate” genes in the study:

- OBC and SKVS;
- Determination of the content of natural auto-antibodies to various organs and tissues in the blood serum;
- Study of the subpopulation composition of T- and B-lymphocytes, analysis of the functional activity of T- and B-lymphocytes, as well as NK cells.

**Results and discussion:** Clinical characteristics of the examined patients with vitiligo. The average age of patients seeking medical help ranged from 12 to 59 years, among which the number of women was significantly higher than that of men.

Of the clinical forms of the disease, the vulgar form: multiple, randomly or (mostly) symmetrically located spots on the skin of the trunk, limbs and face was observed in 58 (76.3%) patients. Acrofacial: damage to the hands, feet, face in the periorbital and perioral areas - in 11 (14.4%). Focal: one or more spots in one area - in 5 (6.7%). Segmental: spot along the nerve or plexus - in 2 (2.6%) patients. The combination of vitiligo and Setton's nevus - depigmentation surrounding the birthmark was detected in 6 patients with the vulgar form of the disease. 2 patients had depigmentation of the scalp hair (leukotrichia).

When comparing the genotypes of 69 patients with vitiligo and 20 healthy donors (control group), for the OBC and CMDD genes with known functions, and comparing the obtained data with the phenotypic characteristics of the patients, we found a new association of a single single nucleotide polymorphism with vitiligo. Thus, a general analysis demonstrated an association of haplotypes of the CMVS gene encoding the beta subunit of the C protein with vitiligo, compared with healthy donors (Fig. 1). According to the literature, the rs 5443 polymorphism modulates the immune response

of T-lymphocytes and is associated with type II diabetes [Baton M., 2008], which makes it possible to participate in the autoimmune component of the pathogenesis of vitiligo. Figure 1. Results of the analysis of polymorphism of the SMVS gene.

**Conclusions:** As a result of our genotyping of patients with vitiligo, an association of haplotypes of the SCVZ gene encoding the beta subunit of the C-protein with vitiligo was revealed. Considering that the gs 5443 polymorphism modulates the immune response of T-lymphocytes and is associated with type II diabetes, this makes possible its involvement in the autoimmune component of the pathogenesis of vitiligo.

### LITERATURE

1. Davlatovich A. X., O'gli A. B. X., O'gli I. A. S. BOLALARDA GENITAL GERPESNI DAVOLASH SAMARADORLIGINI BAHOLASH //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMYIY JURNALI. – 2022. – C. 367-369.

2. Xolmurodovich D. J., Orifovich R. S., Davlatovich A. X. FEATURES OF THE MICROELEMENT STATUS FOR THE DEVELOPMENT OF ATOPIC DERMATITIS IN CHILDREN //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMYIY JURNALI. – 2022. – C. 447-450.

3. Davlatovich A. X. DETERMINATION OF GENE ACTIVITY IN VITILIGO PATIENTS //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMYIY JURNALI. – 2022. – C. 451-454.

4. Davlatovich A. X. et al. EVALUATION OF THE GENERAL SOMATIC STATUS OF PATIENTS WITH VITILIGO BASED ON THE DETERMINATION OF THE CONTENT OF NATURAL ANTIBODIES TO VARIOUS ORGANIS AND TISSUES OF THE BODY //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMYIY JURNALI. – 2022. – C. 472-476.

5. Davlatovich A. X. et al. USING IMMUNOMAX AND 0.1% TACROLIMUS OINTMENT IN THE TREATMENT OF VITILIGO //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMYIY JURNALI. – 2022. – C. 559-562.

6. Абдуллаев Х., Толибов М. Allergodermatozlar bilan bog'liq bo'lgan vulgar asneni kompleks davolash Samaraligini o'rganish //Журнал гепатогастроэнтерологических исследований. – 2021. – Т. 2. – №. 3.2. – С. 73-74.
7. Ахмедов Ш. К. и др. ЭФФЕКТИВНОСТЬ ЛЕЧЕНИЯ ИЗОТРЕТИНОИНА ПРИ ЛЕЧЕНИИ УГРЕВОЙ БОЛЕЗНИ //Академический журнал Западной Сибири. – 2015. – Т. 11. – №. 1. – С. 56-56.
8. Нуруллаева А. А., Рахматова А. Х., Абдуллаев Х. Д. ЗНАЧЕНИЕ МИКРОБНОГО ОБСЕМЕНЕНИЯ КОЖИ ПРИ НЕКОТОРЫХ ЗУДЯЩИХ ДЕРМАТОЗАХ //Молодежь и медицинская наука в XXI веке. – 2019. – С. 125-125.
9. Абдуллаев Х. Д., Собиров М. С., Жумаева Д. Х. НЕРВНО-ПСИХИЧЕСКИЙ СТАТУС У БОЛЬНЫХ СЕБОРЕЕЙ //Молодежь и медицинская наука в XXI веке. – 2018. – С. 115-116.
10. Iskandarovna K. M. SIFILISNING IMMUNOASSAY SHAKLLARI //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – С. 534-536.
11. Iskandarovna K. M., Dilshodovna A. D., Adxamovna A. A. Impact of Socio-Hygienic Conditions of Life on the Health of Students //Central Asian Journal of Medical and Natural Science. – 2022. – Т. 3. – №. 5. – С. 644-646.
12. Iskandarovna K. M. et al. Comprehensive Assessment of the Levels of Somatic Health and Disturbances of Adaptation Reserves in Medical Students //Central Asian Journal of Medical and Natural Science. – 2022. – Т. 3. – №. 5. – С. 641-643.
13. Iskandarovna K. M., Alamovich K. A., Rabbimovich N. A. Treatment of Urethrogenic Prostatitis Associated with Chlamydia Infection //ТА'ЛИМ ВА RIVOJLANISH TAHLILI ONLAYN ILMIIY JURNALI. – 2021. – Т. 1. – №. 5. – С. 44-46.
14. Iskandarovna K. M., Buribaevna I. S., Azamovna A. N. Immunoassay Forms of Syphilis //ТА'ЛИМ ВА RIVOJLANISH TAHLILI ONLAYN ILMIIY JURNALI. – 2021. – Т. 1. – №. 5. – С. 47-49.



15. Ахмедова М. М., Абдуллаев Х. Д., Камолова М. И. ОЦЕНКА ЭФФЕКТИВНОСТИ МЕТОДОВ ЛЕЧЕНИЯ ОНИХОМИКОЗОВ У ВЗРОСЛЫХ //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – Т. 2. – №. 3. – С. 186-190.
16. Tolibov M. M., qizi Buronova F. Z. MAHALLIY OZON TERAPIYASINI QO ‘LLAGAN HOLDA KOMPLEKS DAVOLASH FONIDA YOSH ERKAKLARDA SURUNKALI URETROGEN PROSTATIT (CUP) KECHISHINI O ‘RGANISH //Educational Research in Universal Sciences. – 2024. – Т. 3. – №. 1. – С. 417-421.
17. Tolibov M. M., Shodmonova M. A. BOLALARDA ATOPIK DERMATIT (AD) PATOGENEZIDA GENETIK OMILLARNING ROLINI BAHOLASH VA IMMUNOLOGIK PARAMETRLARGA QARAB ANIQLANGAN POLIMORFIZMLARNING PROGNOZIK AHAMIYATINI ANIQLASH //Educational Research in Universal Sciences. – 2024. – Т. 3. – №. 1. – С. 406-410.
18. Tolibov M. M. et al. ATOPIK DERMATITNI DAVOLASHDA LAZER TERAPIYASINING SAMARADORLIGI //Educational Research in Universal Sciences. – 2024. – Т. 3. – №. 1. – С. 286-289.
19. Utayev A. J., Tolibov M. M., Axmedova M. M. MANAGEMENT APPROACHES FOR CHRONIC URETHROGENIC PROSTATITIS //Modern Scientific Research International Scientific Journal. – 2024. – Т. 2. – №. 1. – С. 151-156.
20. Makhmudovich T. M. ATOPIC DERMATITIS INCIDENT LEVEL, DIAGNOSTIC CRITERIA AND PROGNOSTIC IMPORTANCE //JOURNAL OF APPLIED MEDICAL SCIENCES. – 2023. – Т. 6. – №. 4. – С. 158-168.
21. Толибов М. М. СОВРЕМЕННОЕ СОСТОЯНИЕ ПРОБЛЕМ ЭПИДЕМИОЛОГИИ, МИКРОБИОЛОГИИ И ТЕРАПИИ АКНЕ (ОБЗОР ЛИТЕРАТУРЫ) //SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM. – 2023. – Т. 2. – №. 14. – С. 215-224.



22. Пыяевна P. U. et al. DERMATOSCOPIC PAINTING SOME COMMON DERMATOSES //World scientific research journal. – 2023. – Т. 16. – №. 2. – С. 107-120.
23. Пыяевна P. U. et al. MODERN TRENDS IN TREATMENT SICK MICROSPORIA //World scientific research journal. – 2023. – Т. 16. – №. 2. – С. 98-106.
24. Kholikovich E. S. et al. APPLICATION OF" BETASALIK" OINTMENT IN THE THERAPY OF CHRONIC INFLAMMATORY AND ALLERGIC DERMATOSES //Journal of new century innovations. – 2023. – Т. 31. – №. 3. – С. 56-62.
25. Мансур Т. М., Вохидов Ж. Ж. СОВРЕМЕННЫЕ МЕТОДЫ ЛЕЧЕНИЯ БОЛЕЗНИ ВИТИЛИГО //SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM. – 2023. – Т. 2. – №. 14. – С. 234-244.
26. Мансур Т. М., Вохидов Ж. Ж. СОВРЕМЕННОЙ МЕТОДЫ АЛОПЕЦИЯ ДИАГНОСТИКА И ЛЕЧЕНИЕ //SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM. – 2023. – Т. 2. – №. 14. – С. 225-233.
27. Толибов М. М. и др. ОПТИМИЗАЦИЯ К ЛЕЧЕНИЮ ТЯЖЕЛЫХ ОБОЖЖЕННЫХ БОЛЬНЫХ //SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM. – 2023. – Т. 2. – №. 14. – С. 190-199.
28. Абдуллаев Д. М., Тошев С. У., Толибов М. М. КОМПЛЕКСНЫЙ МЕТОД ЛЕЧЕНИЯ ВУЛЬГАРНЫХ УГРЕЙ //Актуальные аспекты медицинской деятельности. – 2021. – С. 254-256.
29. Абдуллаев Х., Толибов М. Allergodermatozlar bilan bog‘liq bo‘lgan vulgar asneni kompleks davolash Samaraligini o‘rganish //Журнал гепатогастроэнтерологических исследований. – 2021. – Т. 2. – №. 3.2. – С. 73-74.

## INVESTIGATION OF THE MICROELEMENT CONTENT OF PATIENTS' HAIR WITH DIFFUSE ALOPECIA

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***Annotation:** This article attempts to reveal the main reasons for the study of the microelement composition of the hair of patients with diffuse alopecia. To carry out scientific work, the author conducted a study and assessment of changes in the parameters of the microelement composition of hair in 50 patients with telogen hair loss, with voluntary informed consent, the method of spectral analysis was used to study the mineral composition of hair. The problem in question is still little studied, therefore, requires more thorough research.*

***Key words:** hair, alopecia, microelement status.*

**Introduction:** Alopecia (lit. "baldness" from other Greek ἀλωπεκία through Latin Alopecia "baldness, baldness") is a pathological hair loss, leading to their partial or complete disappearance in certain areas of the head or torso. The most common types of alopecia include androgenetic (androgenetic), diffuse or symptomatic (effluviums), focal or nested (areata), scarring (scarring).

Diffuse alopecia is characterized by severe uniform hair loss over the entire surface of the scalp in men and women as a result of a failure of hair development cycles. Since diffuse alopecia is a consequence of disturbances in the work of the whole organism, it is sometimes called symptomatic. Diffuse alopecia is the second most common after androgenetic alopecia. Women are more prone to it than men.

There are telogen and anagen forms of diffuse alopecia. In the more common 'telogen' form, after the cause that provoked alopecia, up to 80% of the hair follicles enter the telogen (rest) phase ahead of time, stopping producing hair.

Telogen effluvium can be caused by:

- stress;
- hormonal disorders, eg due to thyroid disease, pregnancy, use of inappropriate hormonal contraceptives;
- long-term use of antibiotics, neuroleptics, antidepressants and a number of other drugs;
- surgical operations, acute infectious and severe chronic diseases;
- diets with a lack of vital elements for the body;
- excessive consumption of beer.

The anagen form of diffuse alopecia occurs when the body, and the hair follicles in particular, is exposed to stronger and faster factors, as a result of which the hair follicles do not have time to "hide" in the rest phase, and the hair begins to fall out immediately from the growth phase (anagen). Such factors are usually radioactive radiation (including after radiotherapy), chemotherapy, poisoning with strong poisons.

In most cases, after the disappearance of the cause of diffuse alopecia, the lost

hair is completely restored within 3-9 months, since here, unlike androgenetic alopecia, there is no death of hair follicles. Therefore, the treatment of diffuse alopecia is aimed, first of all, at finding and eliminating the cause that caused it. After the disappearance of the cause, for faster hair restoration, various growth stimulants (minoxidil) are used for androgenetic alopecia, therapeutic balms, hair masks, hair sprays, and physiotherapy.

**Purpose:** To study the microelement composition of the hair of patients with diffuse alopecia.

**Materials and methods:** In order to solve the problem of studying and evaluating changes in the parameters of the microelement composition of hair in 50 patients with telogen hair loss, with voluntary informed consent, the method of spectral analysis was used to study the mineral composition of hair. A similar study was conducted in healthy individuals with no complaints about the condition of the hair (control group). The group of patients with telogen hair loss consisted of 47 women (94%) and 3 men (6%), aged 20 to 44 years. The mean age was  $32.0 \pm 3.7$  years. Patients complained of hair loss, hair thinning for an average of 3 to 5 years. The trichogram revealed a high percentage of hair in the telogen stage. On the basis of specialized trichological research methods, a clinical diagnosis was made: Telogen hair loss (L65.0). The control group consisted of healthy individuals: 41 women (82%) and 9 men (18%), aged 20 to 44 years, who did not complain of hair loss. The mean age was  $32.0 \pm 3.6$ . The measurements were carried out at the Institute of High-Temperature Electrochemistry, Ural Branch, Russian Academy of Sciences, in the laboratory of electrochemical devices. The measurement room complied with the standards SNiP PA-5-700, SN-245-71 and SNiP-74, GOST 12.1.004.

**Results:** Analysis of the results of the atomic absorption study of the mineral composition of the hair showed that in patients with diffuse alopecia, deviations in the composition of micro- and macroelements are significantly more common. Thus, a significant increase in the content of some toxic trace elements was detected in 61.8% of patients (increased beryllium), in 41.9% of patients, aluminum was

increased, and in 43.3% of patients - barium, potentially toxic (tin in every fourth patient 26.6%). In the comparison group, a significant increase in the content of toxic and conditionally toxic trace elements was much less common: beryllium only in 18% of people, aluminum in 15%.

**Conclusions:** The results obtained, indicating a significant imbalance of macro- and microelements, including those vital in patients with diffuse alopecia (telogen hair loss), which is the basis for recommending an additional examination to patients with diffuse alopecia to determine the microelement composition of hair.

### LITERATURE

1. Iskandarovna K. M. SIFILISNING IMMUNOASSAY SHAKLLARI //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – С. 534-536.

2. Iskandarovna K. M., Dilshodovna A. D., Adxamovna A. A. Impact of Socio-Hygienic Conditions of Life on the Health of Students //Central Asian Journal of Medical and Natural Science. – 2022. – Т. 3. – №. 5. – С. 644-646.

3. Iskandarovna K. M. et al. Comprehensive Assessment of the Levels of Somatic Health and Disturbances of Adaptation Reserves in Medical Students //Central Asian Journal of Medical and Natural Science. – 2022. – Т. 3. – №. 5. – С. 641-643.

4. Iskandarovna K. M., Alamovich K. A., Rabbimovich N. A. Treatment of Urethrogenic Prostatitis Associated with Chlamydia Infection //TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIIY JURNALI. – 2021. – Т. 1. – №. 5. – С. 44-46.

5. Iskandarovna K. M., Buribaevna I. S., Azamovna A. N. Immunoassay Forms of Syphilis //TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIIY JURNALI. – 2021. – Т. 1. – №. 5. – С. 47-49.

6. Ахмедова М. М., Абдуллаев Х. Д., Камолова М. И. ОЦЕНКА ЭФФЕКТИВНОСТИ МЕТОДОВ ЛЕЧЕНИЯ ОНИХОМИКОЗОВ У ВЗРОСЛЫХ

//BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI.  
– 2022. – Т. 2. – №. 3. – С. 186-190.

7. Абдуллаев Д. М., Абдуллаев Х. Д., Камолова М. И. ОПЫТ ПРИМЕНЕНИЯ КРЕМАТЕРБИЗИЛ ПРИ ЛЕЧЕНИИ МИКОЗОВ  
//BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI.  
– 2022. – Т. 2. – №. 3. – С. 181-185.

8. Davlatovich A. X. VAGINAL TRIXOMONADLAR SHTAMMASINI TRIXOPOLGA VA XIMOTRIPSIN BILAN BILAN SEZGICHLIGINI ANIQLASH  
//BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI.  
– 2022. – С. 645-647.

9. Davlatovich A. X., Orifovich S. D., Baxtiyorovich A. S. Studying the Relationship of Local Immune Status and the Course of Burn Disease //Central Asian Journal of Medical and Natural Science. – 2022. – Т. 3. – №. 5. – С. 679-682.

10. Xolmurodovich D. J., Umidovich N. T., Davlatovich A. X. CLINIC COURSE OF NONSPECIFIC PNEUMONIA //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – С. 510-513.

11. Абдуллаев Х. Д. и др. ЛАЗЕР В ЛЕЧЕНИИ ВИТИЛИГО  
//BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI.  
– 2022. – С. 495-500.

12. Hikmatovich I. N. et al. The use of Fungite in the Local Treatment of Genital Herpes //International Journal of Innovative Analyses and Emerging Technology. – 2021. – Т. 1. – №. 5. – С. 231-232.

13. Davlatovich A. X., O'gli A. B. X., O'gli I. A. S. BOLALARDA GENITAL GERPESNI DAVOLASH SAMARADORLIGINI BAHOLASH  
//BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI.  
– 2022. – С. 367-369.

14. Xolmurodovich D. J., Orifovich R. S., Davlatovich A. X. FEATURES OF THE MICROELEMENT STATUS FOR THE DEVELOPMENT OF ATOPIC DERMATITIS IN CHILDREN //BARQARORLIK VA YETAKCHI

TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – C. 447-450.

15. Davlatovich A. X. DETERMINATION OF GENE ACTIVITY IN VITILIGO PATIENTS //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – C. 451-454.

16. Davlatovich A. X. et al. EVALUATION OF THE GENERAL SOMATIC STATUS OF PATIENTS WITH VITILIGO BASED ON THE DETERMINATION OF THE CONTENT OF NATURAL ANTIBODIES TO VARIOUS ORGANIS AND TISSUES OF THE BODY //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – C. 472-476.



## COMBINATIVE TREATING METHODS FOR PAPILLOMAVIRUS INFECTION

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***Annotation:** This article attempts to reveal the main reasons for the creation of a comprehensive system of measures for the treatment of human papillomavirus infection (PVI) and a significant reduction in the recurrence of the disease. To carry out scientific work, the author found that HPV type 16 among patients with cervical cancer is detected in 68.3% of cases, HPV type 18 - in 11.7% of cases. A comparative evaluation of the effectiveness of monotherapy and combined treatment of PVI was carried out in 98 patients (age 25–37 years) with localization of tumor elements in the external genital area. Group I (52 people) consisted of patients who were treated only with the method of laser therapy (copper vapor laser 578 nm "Yakhroma-Med",*

which selectively affects the pathological tissue). Group II (46 people) consisted of patients who received combined treatment: laser destruction, epithelialization occurred within 5–7 days, after which Keravort cream (5% imiquimod) was administered externally, which was applied to the entire surface of the skin where condylomas were localized, capturing visibly healthy skin 1 cm in diameter at night 3 times a week for 4-8 weeks. The problem in question is still little studied, therefore, requires more thorough research.

**Key words:** Human papillomaviruses, treatment, disease recurrence

**Introduction:** Human papillomaviruses (HPV), or human papillomaviruses (HPV, English human papillomavirus, HPV) are a group of viruses from the papillomavirus family, including 27 species from 5 genera (Alphapapillomavirus, Betapapillomavirus, Gammapapillomavirus, Mupapillomavirus and Nupapillomavirus) and more than 170 types (strains).

About 80% of the sexually active population becomes infected with HPV during their lifetime. 660 million people in the world are already infected with HPV (12% of the world's population). 750 thousand cases of HPV-associated cancers and 32 million cases of anogenital warts are registered annually in the world. Every year, more than 300 thousand people die from cancer caused by HPV[7][8][9]. HPV is the most common sexually transmitted disease in the United States, Russia and many other countries.

In itself, HPV infection does not mean evidence of sexual contact, since the standard life cycle of the virus is designed for infection through microcracks in the skin. Infection through the mucous membranes is only more effective and therefore more common. Infection with the virus is possible through shared objects or even a handshake[11][12]. Infection through objects and the skin of other people contributes to the extreme resistance of HPV to antiseptics.

HPV refers to non-enveloped viruses, that is, with a simple, but highly resistant to antiseptics, icosahedral capsid. Inside the capsid, the virus contains double-

stranded DNA in the form of a closed ring. The DNA of the virus duplicates its proteins many times, since the life cycle of the virus requires the breaking off of parts of the DNA[24]

**Purpose:** To create a comprehensive system of measures for the treatment of human papillomavirus infection (PVI) and a significant reduction in the recurrence of the disease.

**Materials and methods:** It was found that HPV type 16 among patients with cervical cancer is detected in 68.3% of cases, HPV type 18 - in 11.7% of cases. A comparative evaluation of the effectiveness of monotherapy and combined treatment of PVI was carried out in 98 patients (age 25–37 years) with localization of tumor elements in the external genital area. Group I (52 people) consisted of patients who were treated only with the method of laser therapy (copper vapor laser 578 nm "Yakhroma-Med", which selectively affects the pathological tissue). Group II (46 people) consisted of patients who received combined treatment: laser destruction, epithelialization occurred within 5–7 days, after which Keravort cream (5% imiquimod) was administered externally, which was applied to the entire surface of the skin where condylomas were localized, capturing visibly healthy skin 1 cm in diameter at night 3 times a week for 4-8 weeks. To assess the effectiveness of therapy, the following approaches were used: comparing the results of an HPV examination before the start of treatment and 4 months after the end of the course of treatment by PCR; assessment of the timing of resolution of clinical manifestations of PVI in patients receiving different treatment regimens; analysis of the frequency of relapses after treatment.

**Results:** The results of comparing the effectiveness of various PVI therapy options according to the criterion "relapse rate after treatment" turned out to be the most significant. In the first group, the recurrence rate was 18%, in the second group of patients, no relapses were noted.

**Conclusions:** Thus, the optimal tactic for the treatment of PVI is combined therapy, which includes the elimination of papillomatous foci by laser therapy using the

Yakhroma-Med apparatus and local immunocorrection. At the same time, it should be noted that the drug "Keravort" is a means of etiotropic therapy for diseases associated with the human papillomavirus.

### LITERATURE

1. Iskandarovna K. M. SIFILISNING IMMUNOASSAY SHAKLLARI //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – С. 534-536.

2. Iskandarovna K. M., Dilshodovna A. D., Adxamovna A. A. Impact of Socio-Hygienic Conditions of Life on the Health of Students //Central Asian Journal of Medical and Natural Science. – 2022. – Т. 3. – №. 5. – С. 644-646.

3. Iskandarovna K. M. et al. Comprehensive Assessment of the Levels of Somatic Health and Disturbances of Adaptation Reserves in Medical Students //Central Asian Journal of Medical and Natural Science. – 2022. – Т. 3. – №. 5. – С. 641-643.

4. Iskandarovna K. M., Alamovich K. A., Rabbimovich N. A. Treatment of Urethrogonic Prostatitis Associated with Chlamydia Infection //TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIIY JURNALI. – 2021. – Т. 1. – №. 5. – С. 44-46.

5. Iskandarovna K. M., Buribaevna I. S., Azamovna A. N. Immunoassay Forms of Syphilis //TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIIY JURNALI. – 2021. – Т. 1. – №. 5. – С. 47-49.

6. Ахмедова М. М., Абдуллаев Х. Д., Камолова М. И. ОЦЕНКА ЭФФЕКТИВНОСТИ МЕТОДОВ ЛЕЧЕНИЯ ОНИХОМИКОЗОВ У ВЗРОСЛЫХ //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – Т. 2. – №. 3. – С. 186-190.

7. Абдуллаев Д. М., Абдуллаев Х. Д., Камолова М. И. ОПЫТ ПРИМЕНЕНИЯ КРЕМАТЕРБИЗИЛ ПРИ ЛЕЧЕНИИ МИКОЗОВ //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – Т. 2. – №. 3. – С. 181-185.

8. Davlatovich A. X. VAGINAL TRIXOMONADLAR SHTAMMASINI TRIXOPOLGA VA XIMOTRIPSIN BILAN BILAN SEZGICHLIGINI ANIQLASH //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – C. 645-647.
9. Davlatovich A. X., Orifovich S. D., Baxtiyorovich A. S. Studying the Relationship of Local Immune Status and the Course of Burn Disease //Central Asian Journal of Medical and Natural Science. – 2022. – T. 3. – №. 5. – C. 679-682.
10. Xolmurodovich D. J., Umidovich N. T., Davlatovich A. X. CLINIC COURSE OF NONSPECIFIC PNEUMONIA //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – C. 510-513.
11. Абдуллаев Х. Д. и др. ЛАЗЕР В ЛЕЧЕНИИ ВИТИЛИГО //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – C. 495-500.
12. Hikmatovich I. N. et al. The use of Fungite in the Local Treatment of Genital Herpes //International Journal of Innovative Analyses and Emerging Technology. – 2021. – T. 1. – №. 5. – C. 231-232.
13. Davlatovich A. X., O'gli A. B. X., O'gli I. A. S. BOLALARDA GENITAL GERPESNI DAVOLASH SAMARADORLIGINI BAHOLASH //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – C. 367-369.
14. Xolmurodovich D. J., Orifovich R. S., Davlatovich A. X. FEATURES OF THE MICROELEMENT STATUS FOR THE DEVELOPMENT OF ATOPIC DERMATITIS IN CHILDREN //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – C. 447-450.
15. Davlatovich A. X. DETERMINATION OF GENE ACTIVITY IN VITILIGO PATIENTS //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – C. 451-454.
16. Davlatovich A. X. et al. EVALUATION OF THE GENERAL SOMATIC STATUS OF PATIENTS WITH VITILIGO BASED ON THE DETERMINATION

OF THE CONTENT OF NATURAL ANTIBODIES TO VARIOUS ORGANIS AND TISSUES OF THE BODY //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – C. 472-476.

17. Davlatovich A. X. et al. USING IMMUNOMAX AND 0.1% TACROLIMUS OINTMENT IN THE TREATMENT OF VITILIGO //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – C. 559-562.

**WHEN PATIENTS RECEIVE A FORMAL DIAGNOSIS OF HERPES,  
THE PRESENCE OF ANTIBODIES TO HIV  
INFECTION IS OBSERVED**

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***Annotation:** This article attempts to reveal the main reasons to evaluate the feasibility of screening for the presence of antibodies to HIV in patients younger than 60 years old with a newly diagnosed herpes zoster (SH). To perform scientific work, the author conducted a retrospective analysis of outpatient records of patients with OH. The problem in question is still little studied, therefore, requires more thorough research.*

***Key words:** Herpes zoster, HIV, antibodies*

**Introduction:** Herpes zoster (lat. Herpes zoster) (syn. - herpes zoster) is a viral



disease characterized by unilateral herpetiform rashes on the skin with severe pain. The causative agent is the varicella zoster virus (Varicella zoster) of the herpesvirus family, at the first meeting with the body (often at a young age) causes typical chicken pox[3][4].

In people who have had chickenpox, the virus goes into a latent state in the nerve nodes. Subsequently, in the elderly and those with weakened immune systems, it can become more active and cause herpes zoster (shingles) - in approximately 10-20% of cases of chicken pox [5].

The frequency of the disease varies from 12 to 15 per 100,000 people aged 60-75 years. In some patients (about 2% among patients with normal immunity and in 10% of patients with immunodeficiencies), the disease occurs again. When children who have not been sick before come into contact with patients with herpes zoster, they may develop typical chicken pox.

Shingles is clearly associated with a drop in the level of varicella-zoster virus-specific T cells in people with a history of chickenpox. An episode of herpes zoster activates a specific T-cell response. Also, in rare cases, shingles occurs in people who have been vaccinated with the (live attenuated) varicella vaccine.

**Purpose:** To evaluate the feasibility of testing for the presence of antibodies to HIV in patients under 60 years of age with a newly diagnosed herpes zoster (SH).

**Materials and methods:** Retrospective analysis of outpatient records of patients with OH.

**Results:** During the above period, OH was diagnosed in 241 patients aged 18 to 92 years. Diagnosis of OH was carried out on the basis of characteristic complaints, typical clinical manifestations on the skin and mucous membranes. PCR was not required to identify the Varicella zoster virus from lesions. All patients were diagnosed with OH for the first time, no cases of disease recurrence were registered. The mean age of all patients with OH ( $M \pm m$ ) was  $55.4 \pm 1.2$  years, the median was 60 years. There was no significant difference in age according to gender. Women had OH 1.8 times more often than men (156 versus 85). At the age of 60 years and older,

124 (51.5%) patients with OH were registered (83 women, 41 men), younger than 60 years - 117 (73 women, 44 men). The mean age of the group of patients with OH <60 years was  $39.8 \pm 1.2$  years, the median was 39 years. When diagnosing OH, persons under 60 were recommended to undergo an examination for the presence of antibodies to HIV with mandatory pre- and post-test counseling on HIV prevention. During pre-test counseling, 3 people reported being infected with HIV. The remaining 114 patients, after signing the informed consent, underwent blood sampling and testing for the presence of antibodies to HIV by code 113. 105 negative and 9 positive results were revealed. Subsequently, it was found that 5 subjects knew that they had HIV infection, but hid this fact from the doctor who conducted the pre-test counseling, and 4 patients were diagnosed with HIV for the first time. In total, 10.3% of patients with OH under 60 years of age had HIV infection (5 women, 7 men).

**Conclusions:** When diagnosing OH in persons under 60 years of age for the first time and/or in case of a recurrent course, it is advisable to test for the presence of antibodies to HIV due to the high incidence of HIV infection in this category of patients. The current sanitary and epidemiological rules SP 3.1.5.2826-10 "Prevention of HIV infection" provide for testing for the presence of antibodies to HIV only in people under 60 years of age with recurrent OH, which does not fully allow timely detection of HIV-infected people.

#### LITERATURE:

1. LT I. et al. EFFICIENCY OF OXIBRAL IN CHILDREN WITH RESPIRATORY DISEASES, SUFFERING MINIMUM BRAIN DYSFUNCTION.
2. Ахмедова М. М. Обменные нефропатии у детей раннего возраста при пневмонии //Общество и инновации. – 2020. – Т. 1. – №. 1/с. – С. 618-624.
3. LT I. et al. EFFICIENCY OF OXIBRAL IN CHILDREN WITH RESPIRATORY DISEASES, SUFFERING MINIMUM BRAIN DYSFUNCTION.

4. Makhmudovna A. M. Features of the Course of Acute Obstructive Bronchitis in Infant Children //Web of Scholars: Multidimensional Research Journal. – 2022. – Т. 1. – №. 6. – С. 321-325.

5. Makhmudovna A. M. Study the Influence of the Type of Feeding on the Course of Diseases //Central Asian Journal of Medical and Natural Science. – 2022. – Т. 3. – №. 5. – С. 628-631.

6. Расулова Н. и др. Изучение факторов риска развития рахита под контролем 25 (он) d в сыворотке крови у детей //Журнал проблемы биологии и медицины. – 2016. – №. 3 (89). – С. 78-80.

7. Шарипов Р. и др. ЭФФЕКТИВНОСТЬ ОКСИБРАЛА ПРИ КОРРЕКЦИИ НАРУШЕНИЙ ЛИПИДНОЙ ПЕРОКСИДАЦИИ У ДЕТЕЙ С ПОСЛЕДСТВИЯМИ ПЕРИНАТАЛЬНОГО ПОВРЕЖДЕНИЯ НЕРВНОЙ СИСТЕМЫ //Журнал вестник врача. – 2020. – Т. 1. – №. 1. – С. 101-103.

8. Axmedova M. M., Rasulova N. A., Irbutaeva L. T. Study of partial kidney function in children of early age with nephropathy of metabolic genesis //European Journal of Molecular & Clinical Medicine. – 2020. – Т. 7. – №. 2. – С. 2469-2472.

9. Alisherovna R. N. et al. Prevention of rickets depending on the level of 25 (oh) d in the serum of koi in children 1 year of age in uzbekistan //Central Asian Journal of Medical and Natural Science. – 2021. – Т. 2. – №. 1. – С. 29-33.

10. Шарипов Р., Ахмедова М., Ирбутаева Л. Оценка эффективности бронходилататоров при обструктивных состояниях у детей //Журнал проблемы биологии и медицины. – 2016. – №. 3 (89). – С. 97-99.

11. Шарипов Р. Х. и др. Сравнительная оценка эффективности бронходилататоров при обструктивных состояниях у детей //Достижения науки и образования. – 2019. – №. 11 (52). – С. 91-93.

12. Расулова Н. А. и др. Оценка значимости уровня 25 (он) d3 в сыворотке крови и его влияние на профилактику рахита у детей 1-го года жизни //Достижения науки и образования. – 2019. – №. 11 (52). – С. 45-49.

13. Расулова Н. и др. Взаимосвязь факторов риска развития рахита с уровнем 25 (ОН) d 3 в сыворотке крови у детей //Журнал вестник врача. – 2017. – Т. 1. – №. 1. – С. 41-44.
14. Шарипов Р. и др. Бронхообструктивный синдром и методы коррекции у детей //Журнал вестник врача. – 2017. – Т. 1. – №. 1. – С. 53-55.
15. Ахмедова М. М. и др. Дифференциальная диагностика поражения почек обменного генеза у детей раннего возраста //Достижения науки и образования. – 2019. – №. 12 (53). – С. 37-40.
16. Ахмедова М. М., Абдуллаев Х. Д., Камолова М. И. ОЦЕНКА ЭФФЕКТИВНОСТИ МЕТОДОВ ЛЕЧЕНИЯ ОНИХОМИКОЗОВ У ВЗРОСЛЫХ //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – Т. 2. – №. 3. – С. 186-190.
17. Ахмедова М., Расулова Н., Абдуллаев Х. Изучение парциальных функций почек у детей раннего возраста с нефропатией обменного генеза //Журнал проблемы биологии и медицины. – 2016. – №. 2 (87). – С. 37-40.
18. Iskandarovna K. M. SIFILISNING IMMUNOASSAY SHAKLLARI //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – С. 534-536.
19. Iskandarovna K. M., Dilshodovna A. D., Adxamovna A. A. Impact of Socio-Hygienic Conditions of Life on the Health of Students //Central Asian Journal of Medical and Natural Science. – 2022. – Т. 3. – №. 5. – С. 644-646.
20. Iskandarovna K. M. et al. Comprehensive Assessment of the Levels of Somatic Health and Disturbances of Adaptation Reserves in Medical Students //Central Asian Journal of Medical and Natural Science. – 2022. – Т. 3. – №. 5. – С. 641-643.
21. Iskandarovna K. M., Alamovich K. A., Rabbimovich N. A. Treatment of Urethrogenic Prostatitis Associated with Chlamydia Infection //TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIIY JURNALI. – 2021. – Т. 1. – №. 5. – С. 44-46.

22. Iskandarovna K. M., Buribaevna I. S., Azamovna A. N. Immunoassay Forms of Syphilis //TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIY JURNALI. – 2021. – Т. 1. – №. 5. – С. 47-49.
23. Ахмедова М. М., Абдуллаев Х. Д., Камолова М. И. ОЦЕНКА ЭФФЕКТИВНОСТИ МЕТОДОВ ЛЕЧЕНИЯ ОНИХОМИКОЗОВ У ВЗРОСЛЫХ //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – Т. 2. – №. 3. – С. 186-190.
24. Абдуллаев Д. М., Абдуллаев Х. Д., Камолова М. И. ОПЫТ ПРИМЕНЕНИЯ КРЕМАТЕРБИЗИЛ ПРИ ЛЕЧЕНИИ МИКОЗОВ //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – Т. 2. – №. 3. – С. 181-185.
25. Davlatovich A. X. VAGINAL TRIXOMONADLAR SHTAMMASINI TRIXOPOLGA VA XIMOTRIPSIN BILAN BILAN SEZGICHLIGINI ANIQLASH //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – С. 645-647.
26. Davlatovich A. X., Orifovich S. D., Baxtiyorovich A. S. Studying the Relationship of Local Immune Status and the Course of Burn Disease //Central Asian Journal of Medical and Natural Science. – 2022. – Т. 3. – №. 5. – С. 679-682.
27. Xolmurodovich D. J., Umidovich N. T., Davlatovich A. X. CLINIC COURSE OF NONSPECIFIC PNEUMONIA //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – С. 510-513.
28. Абдуллаев Х. Д. и др. ЛАЗЕР В ЛЕЧЕНИИ ВИТИЛИГО //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – С. 495-500.
29. Hikmatovich I. N. et al. The use of Fungite in the Local Treatment of Genital Herpes //International Journal of Innovative Analyses and Emerging Technology. – 2021. – Т. 1. – №. 5. – С. 231-232.

## PROMOTING A WELL-ROUNDED LIFESTYLE FOR SCHOOL KIDS AND COLLEGE STUDENTS

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***Annotation:** This article attempts to reveal the main reasons for the role of attitudes towards healthy lifestyles among high school students and university graduate students. To carry out scientific work, the author used the methods of questionnaire survey, analytical, logical and statistical. The primary material was obtained using the method of questionnaire survey, in which 30 high school students and 36 students of the Medical University were involved. To substantiate the conclusions in the descriptive statistics of the study results, relative percentages were used. The problem in question is still little studied, therefore, requires more thorough research.*

**Key words:** *Public health, Formation of a healthy lifestyle (HLS), students.*

**Introduction:** Public health is the study and development of strategic and tactical organizational, medical and social proposals aimed at protecting and improving the level of public health and the quality of medical care.

By the nature of its activity, public health is the study of the healing effect, as well as the adverse impact of social factors and conditions on the health of the population and its groups, and the development of scientifically based recommendations for the elimination and prevention of the influence of social conditions and factors harmful to human health in the interests of protecting and improving level of public health. (Great Medical Encyclopedia (BME. 3rd ed. - T. 25. - P. 60).

The object of public health research is: users of services of medical institutions, health care institutions, medical personnel, regulations and others.

Public health and healthcare (also public health) is a branch of medicine that studies the public health system and healthcare organizations, as well as social (public) health problems. This is the theoretical foundation of healthcare.

The health of young people today is of great interest, because the health of the nation subsequently depends on the state of this category of the population. The formation of a healthy lifestyle (HLS) for students is a complex task, in the implementation of which, of course, educational organizations play the main role. However, as practice shows, few people think about the health of students during intensive classroom studies. Scheduled breaks from 10 to 60 minutes, provided for the restoration of students' working capacity, are used by the latter more often incorrectly, without benefit to their health. The knowledge about healthy lifestyles acquired at school does not find practical application within the walls of the university, and this mission assigned to the system of vocational education, according to experts, is not being fulfilled.

**Aim:** To study the attitude towards healthy lifestyles of high school students and university graduate students.



**Materials and Methods:** To achieve the aim of the study, the methods of questionnaire survey, analytical, logical and statistical were used. The primary material was obtained using the method of questionnaire survey, in which 30 high school students and 36 students of the Medical University were involved. To substantiate the conclusions in the descriptive statistics of the study results, relative percentages were used.

**Results:** According to a questionnaire survey, the majority of schoolchildren (53.3%) and students (33.3%) feel tired at the end of all classes, while the proportion of people who come to class already tired is higher - 16.7% compared to 3% of students. It was found that almost a quarter of school students (26.7%) do not know how to cope with stress, but want to learn it. For students, smoking during breaks is a habit in 13.9% of cases, while for 25% of schoolchildren it is a way of making new acquaintances. In their free time between classes, the majority of schoolchildren and students prefer to eat: 46.7% and 55.6%, respectively. According to high school students, a healthy lifestyle contributes more to success in life (30%), overshadowing its influence on attractiveness (23.3%) and good mood (10%). The results obtained in this study coincide with the materials of sociological surveys of students presented by S.A. Strizhov (2009), according to which a healthy lifestyle improves health (80.6%), supports working capacity (60.8%), provides a good mood (53%), maintains attractiveness (46.7%), and contributes to success in life and business (45.5%) [5].

**Conclusions:** Given the importance of a healthy lifestyle for young people and the available reserves for its improvement, this work must be purposefully carried out in all educational organizations.

## LITERATURE

1. Нарзикулов Р. М. и др. Новый подход в лечении витилиго //НАУЧНЫЕ ИССЛЕДОВАНИЯ. – 2019. – С. 60.

2. Саламова Л. М., Нарзикулов Р. М., Абдуллаев Д. М. Об эффективности Гепона в терапии остроконечных кандилом //Тюменский медицинский журнал. – 2011. – №. 2. – С. 52.
3. Баратова М. Р., Исмаилова Г. А., Нарзикулов Р. М. Иммунологическая оценка больных с аллергическим дерматитом среди работников сельского хозяйства //Тюменский медицинский журнал. – 2011. – №. 2. – С. 50.
4. Нарзикулов Р. М., Абдуллаев Д. М., Атабаев Н. А. Клиническая эффективность применения Гепона в лечении гангренозной формы опоясывающего лишая //Тюменский медицинский журнал. – 2011. – №. 2. – С. 51-52.
5. Нарзикулов Р. М. Клинико-лабораторная оценка эффективности нового комплексного метода лечения больных мочеполовым трихомонозом : дис. – М. : Автореф. дис.... канд. мед. наук, 1990.
6. Абдуллаев Д. М., Нарзикулов Р. М., Атабаев Н. А. Применение Гепона в лечении больных очаговой склеродермией //Тюменский медицинский журнал. – 2011. – №. 2. – С. 49-50.
7. Azim B. et al. The state of free-radical oxidation of lipids in experimental myocardial infarction in rats //European Journal of Molecular & Clinical Medicine. – 2021. – Т. 8. – №. 3. – С. 816-820.
8. Uktamovich T. S., Vakhobiddinovich A. D. Complex Therapy of Patients with Atopic Dermatitis //Central Asian Journal of Medical and Natural Science. – 2022. – Т. 3. – №. 5. – С. 653-655.
9. Uktamovich T. S., Umedovich S. U. Effectiveness of Treatment of Testicular Torsion //Central Asian Journal of Medical and Natural Science. – 2022. – Т. 3. – №. 5. – С. 647-649.
10. Uktamovich T. S., Fakhriddinovich F. K. Effectiveness of the Treatment of Limited Scleroderma //Central Asian Journal of Medical and Natural Science. – 2022. – Т. 3. – №. 5. – С. 650-652.
11. Toshev S. U. APPLICATIONS OF ELACON FOR LICHEN PLANE

//Asian journal of pharmaceutical and biological research. – 2022. – Т. 11. – №. 2.

12. Toshev S. U. THE USE OF ADVANTAN IN THE LOCAL TREATMENT OF GENITAL HERPES //Asian journal of pharmaceutical and biological research. – 2022. – Т. 11. – №. 2.

13. Ахмедова М. М., Абдуллаев Д. М., Тошев С. У. ИСПОЛЬЗОВАНИЯ МАЗЬИКУРАЛИМУС ПРИ ЛЕЧЕНИИ КРАСНОГО ПЛОСКОГО ЛИШАЯ //BARQARORLIK VA YETAKSHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – Т. 2. – №. 3. – С. 191-193.

14. Нарзикулов Р. и др. Принципы терапии у женщин больных гонореей ассоциированные иппп //Журнал вестник врача. – 2019. – Т. 1. – №. 1. – С. 99-102.

15. Абдуллаев Д. М., Тошев С. У., Толибов М. М. КОМПЛЕКСНЫЙ МЕТОД ЛЕЧЕНИЯ ВУЛЬГАРНЫХ УГРЕЙ //Актуальные аспекты медицинской деятельности. – 2021. – С. 254-256.

16. Нарзикулов Р. М. и др. Новый подход в лечении витилиго //НАУЧНЫЕ ИССЛЕДОВАНИЯ. – 2019. – С. 60.

17. Rizaev J. A. et al. Medical and organizational measures to improve the provision of medical care in the dermatovenerology profile //International Journal of Current Research and Review. – 2020. – Т. 12. – №. 24. – С. 120-122.

18. Тошев С. У., Сулаймонов А. Л., Тиллакобилов И. Б. ТЕРАПИЯ ВИТИЛИГО С ПРИМЕНЕНИЕМ ПОЛИОКСИДОНИЯ В СОЧЕТАНИИ С ЛЮКОДЕРМИНОМ //Высшая школа: научные исследования. – 2019. – С. 55-59.

19. Тошев С. У., Аширов З. Ф., Абдуллаев Х. Д. ЛЕЧЕНИЕ ВИТИЛИГО 308-НМ ЭКСИМЕРНЫМ ЛАЗЕРОМ //Актуальные аспекты медицинской деятельности. – 2021. – С. 240-243.

20. Salamova L. A. et al. Evaluation of the effectiveness of the drug gepon in the treatment of genital condylomas. – 2021.

21. Davlatovich A. X. VAGINAL TRIXOMONADLAR SHITAMMASINI TRIXOPOLGA VA XIMOTRIPSIN BILAN BILAN SEZGICHLIGINI ANIQLASH

//BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI.  
– 2022. – С. 645-647.

22. Davlatovich A. X., Orifovich S. D., Baxtiyorovich A. S. Studying the Relationship of Local Immune Status and the Course of Burn Disease //Central Asian Journal of Medical and Natural Science. – 2022. – Т. 3. – №. 5. – С. 679-682.

23. Xolmurodovich D. J., Umidovich N. T., Davlatovich A. X. CLINIC COURSE OF NONSPECIFIC PNEUMONIA //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – С. 510-513.

24. Абдуллаев Х. Д. и др. ЛАЗЕР В ЛЕЧЕНИИ ВИТИЛИГО //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI.  
– 2022. – С. 495-500.

25. Hikmatovich I. N. et al. The use of Fungite in the Local Treatment of Genital Herpes //International Journal of Innovative Analyses and Emerging Technology. – 2021. – Т. 1. – №. 5. – С. 231-232.

## FRESH PERSPECTIVE ON THE PROGRESSION OF SEXUALLY TRANSMITTED INFECTIONS

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**Annotation:** *Enzyme immunoassay (ELISA) is one of the modern serological tests for syphilis and is used to diagnose both current and past syphilitic infection. The determination of antitreponemal IgG and IgM is of crucial importance for the diagnosis of early forms of congenital syphilis, differential diagnosis of reinfection-relapses, as well as for the study of the causes of seroresistance.*

**Keywords:** *Immunoassay, syphilis.*

**Introduction:** Syphilis is characterized by a fairly high number of patients, medical and social significance, difficulties in diagnosis and treatment. In the 90s, the

fifth "wave" of the syphilis epidemic began in Russia, coinciding with unfavorable socio-economic factors, the growth of prostitution, and the abolition of legislative acts on the control and prevention of sexually transmitted infections. In 1991, the incidence of syphilis in the country per 100 thousand population was 7.2, and in 1997 it was 277.3, i.e. it increased 38.5 times, reaching its peak! In subsequent years, there was a gradual decrease in the incidence, however, and in 2013 the indicator is still high - 28.9. In 1997-2013, the incidence of syphilis in the country is 4 times higher than the initial 1991. It is natural that during the period of an increase in the incidence of syphilis, its early forms – Lues I and Lues II recens (or as it is customary to say today – secondary syphilis with a prescription of up to 6 months) prevail, with a decrease – hidden as early - with a prescription of up to 2 years, and later - more than 2 years. Latent forms of infection (both early and especially late) are insidious because they are a reservoir of possible neurosyphilis, its visceral forms. The second reservoir of these crippling forms of syphilis are patients with seroresistance. Currently, seroresistance is understood as the state of the body, which is characterized by the absence of a decrease in the titers of reagins in the RMP (microprecipitation reaction) by 4 times or more within a year after the end of full-fledged specific treatment of syphilis. What has contributed to the increase in such a contingent of people since 1995? The epidemic of syphilis in the country required the transition to outpatient treatment of patients with this infection. Due to the lack of own research, registration of foreign benzatin-benzylpenicillin (extensillin, retarpen) was carried out, which allowed this transition to be made after the publication of the "Information Letter" in 1995. This official document allowed all infectious forms of syphilis (Lues I, Lues II, Lues latens praecox) to be treated with these reparations, including pregnant women. Of course, treatment with benzatin-benzylpenicillin has played a positive role in the fight against the epidemic. However, in the future, cases of seroresistance began to appear and most often in patients with Lues II recidiva and with Lues latens praecox. In our opinion, back in that distant 1998, the treatment of the above-mentioned forms of syphilis with durant drugs should have been banned in Russia. Nowadays, it should be remembered

that seroresistance is dangerous in its consequences. When performing a spinal puncture in this category of persons, changes in the cerebrospinal fluid (positive serological reactions, increased protein content, cytosis), combined with neurological symptoms, make it possible to establish neurosyphilis in about half of the patients.

**The aim of the study** was to determine the frequency of detection of antitreponemal IgG and Ig M in seroresistant syphilis.

**Material and methods of research:** The blood sera of 25 patients (14 men and 11 women) were examined, in whom serological reactions remained positive after the end of treatment. The main age category was a group of patients aged 20 to 40 years - 12 people, 8 patients aged 40 to 50 years, 5 patients aged 50 to 60 years. The ELISA procedure was performed according to the instructions for use attached to the test system (TS), the optical density of the samples was recorded using a flatbed spectrophotometer (Multiscan, Finland).

In terms of reaction mechanism, sensitivity and specificity, ELISA is close to immunofluorescence (RIF) reactions. The participation of the same antibodies in these reactions, a close titer level, and a high frequency of matching results were noted. Therefore, the results of Ig M-ELISA were compared with DAC and RIBT

**Results:** To detect IdM in people with seroresistance, it is advisable to use test systems characterized by high sensitivity in the late stages of syphilis. It is not recommended to use test systems designed only for early diagnosis of syphilis to detect IdM in people with seroresistance. Since according to the literature, the sensitivity of such test systems in seroresistant syphilis is about 6%. The results of ELISA in the group of patients with seroresistant syphilis are in good agreement with the ideas of suppressing the expression of IdM after adequate specific therapy while maintaining the synthesis and circulation of Ig G in the blood.

It should be noted that all 25 sera were IgM negative, but IgG- positive with varying degrees of optical density (OP). 18 samples had OP above 1.0 and 7 samples had OP below 1.0 Traditional serological tests were positive.



**Conclusion:** One of the main measures aimed at preventing an increase in the incidence of syphilis is the early diagnosis of this infection. Due to the development of more sensitive, specific and less time-consuming serological methods, the use of ELISA has become possible, as well as its use for confirmation in patients with seroresistance in syphilis.

#### LITERATURE:

1. Тошев С. У., Сулаймонов А. Л., Тиллакобилов И. Б. ТЕРАПИЯ ВИТИЛИГО С ПРИМЕНЕНИЕМ ПОЛИОКСИДОНИЯ В СОЧЕТАНИИ С ЛЮКОДЕРМИНОМ //Высшая школа: научные исследования. – 2019. – С. 55-59.
2. Тошев С. У., Аширов З. Ф., Абдуллаев Х. Д. ЛЕЧЕНИЕ ВИТИЛИГО 308-НМ ЭКСИМЕРНЫМ ЛАЗЕРОМ //Актуальные аспекты медицинской деятельности. – 2021. – С. 240-243.
3. Iskandarovna K. M. SIFILISNING IMMUNOASSAY SHAKLLARI //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – С. 534-536.
4. Iskandarovna K. M., Dilshodovna A. D., Adxamovna A. A. Impact of Socio-Hygienic Conditions of Life on the Health of Students //Central Asian Journal of Medical and Natural Science. – 2022. – Т. 3. – №. 5. – С. 644-646.
5. Iskandarovna K. M. et al. Comprehensive Assessment of the Levels of Somatic Health and Disturbances of Adaptation Reserves in Medical Students //Central Asian Journal of Medical and Natural Science. – 2022. – Т. 3. – №. 5. – С. 641-643.
6. Iskandarovna K. M., Alamovich K. A., Rabbimovich N. A. Treatment of Urethrogenic Prostatitis Associated with Chlamydia Infection //TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIIY JURNALI. – 2021. – Т. 1. – №. 5. – С. 44-46.
7. Iskandarovna K. M., Buribaevna I. S., Azamovna A. N. Immunoassay Forms of Syphilis //TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIIY JURNALI. – 2021. – Т. 1. – №. 5. – С. 47-49.

8. Ахмедова М. М., Абдуллаев Х. Д., Камолова М. И. ОЦЕНКА ЭФФЕКТИВНОСТИ МЕТОДОВ ЛЕЧЕНИЯ ОНИХОМИКОЗОВ У ВЗРОСЛЫХ //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – Т. 2. – №. 3. – С. 186-190.
9. Абдуллаев Д. М., Абдуллаев Х. Д., Камолова М. И. ОПЫТ ПРИМЕНЕНИЯ КРЕМАТЕРБИЗИЛ ПРИ ЛЕЧЕНИИ МИКОЗОВ //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – Т. 2. – №. 3. – С. 181-185.
10. Davlatovich A. X. VAGINAL TRIXOMONADLAR SHTAMMASINI TRIXOPOLGA VA XIMOTRIPSIN BILAN BILAN SEZGICHLIGINI ANIQLASH //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – С. 645-647.
11. Davlatovich A. X., Orifovich S. D., Baxtiyorovich A. S. Studying the Relationship of Local Immune Status and the Course of Burn Disease //Central Asian Journal of Medical and Natural Science. – 2022. – Т. 3. – №. 5. – С. 679-682.
12. Xolmurodovich D. J., Umidovich N. T., Davlatovich A. X. CLINIC COURSE OF NONSPECIFIC PNEUMONIA //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – С. 510-513.
13. Абдуллаев Х. Д. и др. ЛАЗЕР В ЛЕЧЕНИИ ВИТИЛИГО //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – С. 495-500.
14. Hikmatovich I. N. et al. The use of Fungite in the Local Treatment of Genital Herpes //International Journal of Innovative Analyses and Emerging Technology. – 2021. – Т. 1. – №. 5. – С. 231-232.
15. Davlatovich A. X., O'gli A. B. X., O'gli I. A. S. BOLALARDA GENITAL GERPESNI DAVOLASH SAMARADORLIGINI BAHOLASH //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – С. 367-369.
16. Xolmurodovich D. J., Orifovich R. S., Davlatovich A. X. FEATURES OF

THE MICROELEMENT STATUS FOR THE DEVELOPMENT OF ATOPIC DERMATITIS IN CHILDREN //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – C. 447-450.

17. Davlatovich A. X. DETERMINATION OF GENE ACTIVITY IN VITILIGO PATIENTS //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – C. 451-454.

18. Davlatovich A. X. et al. EVALUATION OF THE GENERAL SOMATIC STATUS OF PATIENTS WITH VITILIGO BASED ON THE DETERMINATION OF THE CONTENT OF NATURAL ANTIBODIES TO VARIOUS ORGANIS AND TISSUES OF THE BODY //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – C. 472-476.

19. Davlatovich A. X. et al. USING IMMUNOMAX AND 0.1% TACROLIMUS OINTMENT IN THE TREATMENT OF VITILIGO //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – C. 559-562.

**UTILIZATION OF SEVORAN IN MANAGING LICHEN PLANUS:  
AN EXPERIENTIAL PERSPECTIVE**

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***Abstract:** The problem of treating lichen planus is still relevant today. An important task of topical application of medicinal compositions is to create an effective concentration in the focus of inflammation and maintain such a concentration for a long period of time. This study describes a method of treating patients with lichen planus with the inclusion of sesoran ointment in standard therapy. A clinical study showed that when using the above drug, the regeneration of lichen planus was observed by the beginning of 2 weeks. The inclusion of sesoran ointment in the treatment regimen makes it possible to accelerate epithelialization and tissue repair, stabilize the inflammatory process.*

**Keywords:** *Lichen planus, treatment, sevoran.*

**Introduction:** In recent years, the prevalence of lichen planus (CPL) in practice has somewhat expanded. Among diseases of the oral mucosa, lichen planus occurs in 75-80% of cases, affecting only the mucous membrane in isolation. It is characterized by a recurrent persistent course with the manifestation of a variety of clinical forms. Despite numerous studies, the etiology and pathogenesis of this disease, characterized by resistance to therapy, remain unclear. There are three most common concepts that provide for the role of functional and organic disorders of the nervous system, toxic and allergic effects, as well as the effects of microbial factors. Speaking about functional disorders of the nervous system, a number of authors point to stress as a factor that plays a decisive role in the occurrence of red lichen planus of the oral mucosa. A positive correlation was revealed between stressful situations and the appearance of rashes in the oral cavity, while exudative hyperemic forms of the disease are most often recorded. The problem of treating patients with lichen planus remains relevant. There are many reasons for this. First of all, lichen planus, like no other dermatosis, depends on a neurogenic factor. Very often, the first manifestations of the disease appear after stressful situations. In the conditions of a modern industrial city, overstrain and nervous overload are so common that the prevalence of lichen planus is steadily increasing. Unexplained issues of etiopathogenesis of lichen planus cause the use of numerous medications for its treatment, but modern therapy does not always provide a good result. Treatment, as a rule, is delayed for a long period, it is rarely possible to achieve stable and positive remission.

**Aim:** To study the efficacy and preparation of sizaron in the treatment of lichen planus.

**Materials and methods of the study:** 23 patients aged 18 to 56 years with a disease duration of at least 5 months to 4 years with various forms of lichen planus were examined, who made up two groups: the main (11 patients) and the control (12 patients). Patients in the control group underwent traditional treatment, without the use of the drug "sesoran". This drug is a combination drug for topical use. Complex

treatment was carried out according to generally accepted schemes, including general and local therapy. All patients were necessarily referred for consultations by a therapist, endocrinologist, allergist and other specialists in order to diagnose and treat somatic diseases. Pharmacotherapy included the appointment of sedative therapy (novopassit; motherwort tincture); vitamins. All irritating factors in the oral cavity, sharp edges of teeth were eliminated, dentures, fillings made of different metals were replaced, thorough sanitation of the oral cavity was carried out. The affected areas of the oral mucosa were treated with non-irritating antiseptics. Local treatment was aimed at eliminating pain and inflammation, normalizing microcirculation and stimulating epithelialization. For this purpose, applications of the drug "serazan" were used.

**Results:** In group 1, clinical recovery was observed for (on average) 21-25 days in group 2, clinical recovery was observed for (on average 12-14 days). Minor symptoms of skin irritation on the use of sizarone ointment 0.025% were observed in 2 out of 3 patients at the beginning of use, but this did not require the drug to be discontinued.

After the treatment, the patients were monitored for relapses for 6 months. There was no relapse in the group of patients receiving cesaran, in 1 group of patients, a relapse of the disease developed in 1 patient out of 3 =x. As a result of the therapy performed at the site of application of sesaran ointment, skin atrophy was not observed.

**Conclusions:** Given the lack of a unified concept regarding the etiology and pathogenesis of lichen planus, treatment should be comprehensive with the use of modern medicines. The consistent use of Cesar's ointment in the treatment of manifestations of lichen planus has shown high effectiveness in relieving symptoms in most patients, long-term remission was achieved, good tolerability was noted, and there were no complications.

**LITERATURE:**

1. Iskandarovna K. M. SIFILISNING IMMUNOASSAY SHAKLLARI //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – С. 534-536.
2. Iskandarovna K. M., Dilshodovna A. D., Adxamovna A. A. Impact of Socio-Hygienic Conditions of Life on the Health of Students //Central Asian Journal of Medical and Natural Science. – 2022. – Т. 3. – №. 5. – С. 644-646.
3. Iskandarovna K. M. et al. Comprehensive Assessment of the Levels of Somatic Health and Disturbances of Adaptation Reserves in Medical Students //Central Asian Journal of Medical and Natural Science. – 2022. – Т. 3. – №. 5. – С. 641-643.
4. Iskandarovna K. M., Alamovich K. A., Rabbimovich N. A. Treatment of Urethrogenic Prostatitis Associated with Chlamydia Infection //TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIIY JURNALI. – 2021. – Т. 1. – №. 5. – С. 44-46.
5. Iskandarovna K. M., Buribaevna I. S., Azamovna A. N. Immunoassay Forms of Syphilis //TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIIY JURNALI. – 2021. – Т. 1. – №. 5. – С. 47-49.
6. Ахмедова М. М., Абдуллаев Х. Д., Камолова М. И. ОЦЕНКА ЭФФЕКТИВНОСТИ МЕТОДОВ ЛЕЧЕНИЯ ОНИХОМИКОЗОВ У ВЗРОСЛЫХ //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – Т. 2. – №. 3. – С. 186-190.
7. Абдуллаев Д. М., Абдуллаев Х. Д., Камолова М. И. ОПЫТ ПРИМЕНЕНИЯ КРЕМАТЕРБИЗИЛ ПРИ ЛЕЧЕНИИ МИКОЗОВ //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – Т. 2. – №. 3. – С. 181-185.
8. Davlatovich A. X. VAGINAL TRIXOMONADLAR SHTAMMASINI TRIXOPOLGA VA XIMOTRIPSIN BILAN BILAN SEZGICHLIGINI ANIQLASH //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – С. 645-647.



9. Davlatovich A. X., Orifovich S. D., Baxtiyorovich A. S. Studying the Relationship of Local Immune Status and the Course of Burn Disease //Central Asian Journal of Medical and Natural Science. – 2022. – Т. 3. – №. 5. – С. 679-682.

10. Xolmurodovich D. J., Umidovich N. T., Davlatovich A. X. CLINIC COURSE OF NONSPECIFIC PNEUMONIA //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – С. 510-513.

11. Абдуллаев Х. Д. и др. ЛАЗЕР В ЛЕЧЕНИИ ВИТИЛИГО //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – С. 495-500.

12. Hikmatovich I. N. et al. The use of Fungite in the Local Treatment of Genital Herpes //International Journal of Innovative Analyses and Emerging Technology. – 2021. – Т. 1. – №. 5. – С. 231-232.

## EXPERIENTIAL PERSPECTIVE ON THE APPLICATION OF TACROLIMUS IN ATOPIC DERMATITIS TREATMENT

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***Abstract:** Data on the mechanisms of formation and methods of effective treatment of atopic dermatitis (AD) are presented. The main directions of pathogenetically based treatment of blood pressure, differentiated correction of concomitant pathology are described in detail. The external therapy of atopic skin lesions in children with the use of modern dermatological cosmetics is presented in particular detail.*

***Keywords:** Atopic dermatitis, treatment, tacrolimus.*

**Introduction:** Atopic dermatitis (atopic eczema, atopic eczema/dermatitis syndrome) is a chronic inflammatory skin disease accompanied by itching, which in typical cases begins in early childhood, can continue or recur in adulthood and leads to physical and emotional maladaptation of the patient and his family members. Atopic dermatitis in childhood and adulthood is a single disease, despite the fact that in the future, genetic subtypes with different expression variants may be isolated. Atopic dermatitis in most cases develops: It occurs in people with a hereditary predisposition and is often combined with other allergic diseases, such as bronchial asthma, allergic rhinitis, food allergies, as well as with recurrent skin infections. ICD10: L20 Atopic dermatitis. Abbreviations: RAST - radioallergosorbent test; MGK - local glucocorticoids; UV - ultraviolet: voe (irradiation). The prevalence of the disease has increased over the past 3 decades and is in developed countries, according to various authors, 10:15% in children under the age of 5 years and 15: 20% in schoolchildren. The reasons for the increase in morbidity are unknown. On the other hand, in some agricultural regions of China, Eastern Europe and Africa, the incidence rate remains at the same level. It was found that atopic dermatitis develops in 81% of children if both parents are sick, in 59% - if only one of the parents is sick, and the other has an allergic pathology of the respiratory tract, and in 56% - if only one of the parents is sick.

**Aim:** Determination of the effectiveness of 0.05% tacrolimus ointment (Tacropic drug) in the external therapy of atopic dermatitis.

**Materials and methods.** The study was conducted on the basis of the regional dermatovenereological dispensary. The study included 26 patients with atopic dermatitis aged 6 to 14 years, skin lesions in the examined patients averaged 14%. Other skin diseases and infectious pathology were excluded. Together with standard treatment, 11 patients with atopic dermatitis of the study group received 0.05% tacrolimus ointment externally twice a day, rubbing a thin layer into the skin, the remaining 10 patients made up the control group and received topical glucocorticosteroids of medium strength and benogam cream, the course of external therapy was 28 days. These groups were comparable in terms of the main clinical

indicators, gender, age, and concomitant pathology. The effectiveness of therapy was monitored based on the dynamics of values (before the start of the study, on the 14th and 28th days of therapy), sleep assessment and subjective symptoms (itching, dryness and soreness of the skin).

**Results and discussion.** All patients tolerated external therapy with 0.03% tacrolimus ointment (Tacropic drug) well, no undesirable effects were detected. Already on the 14th day of therapy, hyperemia, swelling, infiltration decreased in 10 patients of the study group, the intensity of itching subjectively decreased, sleep was restored, which was not observed in patients of the comparison group, by the 28th day of treatment therapy, 100% clinical recovery was observed in patients of the main group compared with the control group, in which 80% clinical recovery was observed for the treatment period of 28 days. In the control group, complete clinical recovery was observed on day 35 of the treatment.

**Conclusions.** As a result of our research, we came to the conclusion that the 0.05% tacrolimus ointment (Tacropic drug) used by us demonstrates high safety and efficacy in the treatment of atopic dermatitis, allowing us to stop subjective and objective signs of the disease in a short time.

#### LITERATURE:

1. Iskandarovna K. M. SIFILISNING IMMUNOASSAY SHAKLLARI //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – C. 534-536.

2. Iskandarovna K. M., Dilshodovna A. D., Adxamovna A. A. Impact of Socio-Hygienic Conditions of Life on the Health of Students //Central Asian Journal of Medical and Natural Science. – 2022. – T. 3. – №. 5. – C. 644-646.

3. Iskandarovna K. M. et al. Comprehensive Assessment of the Levels of Somatic Health and Disturbances of Adaptation Reserves in Medical Students //Central Asian Journal of Medical and Natural Science. – 2022. – T. 3. – №. 5. – C. 641-643.

4. Iskandarovna K. M., Alamovich K. A., Rabbimovich N. A. Treatment of Urethrogenic Prostatitis Associated with Chlamydia Infection //ТА'ЛИМ ВА RIVOJLANISH TAHLILI ONLAYN ILMIY JURNALI. – 2021. – Т. 1. – №. 5. – С. 44-46.

5. Iskandarovna K. M., Buribaevna I. S., Azamovna A. N. Immunoassay Forms of Syphilis //ТА'ЛИМ ВА RIVOJLANISH TAHLILI ONLAYN ILMIY JURNALI. – 2021. – Т. 1. – №. 5. – С. 47-49.

6. Ахмедова М. М., Абдуллаев Х. Д., Камолова М. И. ОЦЕНКА ЭФФЕКТИВНОСТИ МЕТОДОВ ЛЕЧЕНИЯ ОНИХОМИКОЗОВ У ВЗРОСЛЫХ //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – Т. 2. – №. 3. – С. 186-190.

7. Абдуллаев Д. М., Абдуллаев Х. Д., Камолова М. И. ОПЫТ ПРИМЕНЕНИЯ КРЕМАТЕРБИЗИЛ ПРИ ЛЕЧЕНИИ МИКОЗОВ //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – Т. 2. – №. 3. – С. 181-185.

8. Davlatovich A. X. VAGINAL TRIXOMONADLAR SHTAMMASINI TRIXOPOLGA VA XIMOTRIPSIN BILAN BILAN SEZGICHLIGINI ANIQLASH //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – С. 645-647.

9. Davlatovich A. X., Orifovich S. D., Baxtiyorovich A. S. Studying the Relationship of Local Immune Status and the Course of Burn Disease //Central Asian Journal of Medical and Natural Science. – 2022. – Т. 3. – №. 5. – С. 679-682.

10. Xolmurodovich D. J., Umidovich N. T., Davlatovich A. X. CLINIC COURSE OF NONSPECIFIC PNEUMONIA //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – С. 510-513.

11. Абдуллаев Х. Д. и др. ЛАЗЕР В ЛЕЧЕНИИ ВИТИЛИГО //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – С. 495-500.

12. Hikmatovich I. N. et al. The use of Fungite in the Local Treatment of

Genital Herpes //International Journal of Innovative Analyses and Emerging Technology. – 2021. – T. 1. – №. 5. – C. 231-232.

13. Davlatovich A. X., O'gli A. B. X., O'gli I. A. S. BOLALARDA GENITAL GERPESNI DAVOLASH SAMARADORLIGINI BAHOLASH //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – C. 367-369.

14. Xolmurodovich D. J., Orifovich R. S., Davlatovich A. X. FEATURES OF THE MICROELEMENT STATUS FOR THE DEVELOPMENT OF ATOPIC DERMATITIS IN CHILDREN //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – C. 447-450.

15. Davlatovich A. X. DETERMINATION OF GENE ACTIVITY IN VITILIGO PATIENTS //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – C. 451-454.

16. Tolibov M. M., qizi Buronova F. Z. MAHALLIY OZON TERAPIYASINI QO 'LLAGAN HOLDA KOMPLEKS DAVOLASH FONIDA YOSH ERKAKLARDA SURUNKALI URETROGEN PROSTATIT (CUP) KECHISHINI O 'RGANISH //Educational Research in Universal Sciences. – 2024. – T. 3. – №. 1. – C. 417-421.

17. Tolibov M. M., Shodmonova M. A. BOLALARDA ATOPIK DERMATIT (AD) PATOGENEZIDA GENETIK OMILLARNING ROLINI BAHOLASH VA IMMUNOLOGIK PARAMETRLARGA QARAB ANIQLANGAN POLIMORFIZMLARNING PROGNOZIK AHAMIYATINI ANIQLASH //Educational Research in Universal Sciences. – 2024. – T. 3. – №. 1. – C. 406-410.

18. Tolibov M. M. et al. ATOPIK DERMATITNI DAVOLASHDA LAZER TERAPIYASINING SAMARADORLIGI //Educational Research in Universal Sciences. – 2024. – T. 3. – №. 1. – C. 286-289.

19. Utayev A. J., Tolibov M. M., Axmedova M. M. MANAGEMENT APPROACHES FOR CHRONIC URETHROGENIC PROSTATITIS //Modern

Scientific Research International Scientific Journal. – 2024. – Т. 2. – №. 1. – С. 151-156.

20. Makhmudovich T. M. ATOPIC DERMATITIS INCIDENT LEVEL, DIAGNOSTIC CRITERIA AND PROGNOSTIC IMPORTANCE //JOURNAL OF APPLIED MEDICAL SCIENCES. – 2023. – Т. 6. – №. 4. – С. 158-168.

21. Толибов М. М. СОВРЕМЕННОЕ СОСТОЯНИЕ ПРОБЛЕМ ЭПИДЕМИОЛОГИИ, МИКРОБИОЛОГИИ И ТЕРАПИИ АКНЕ (ОБЗОР ЛИТЕРАТУРЫ) //SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM. – 2023. – Т. 2. – №. 14. – С. 215-224.

22. Пыяевна P. U. et al. DERMATOSCOPIC PAINTING SOME COMMON DERMATOSES //World scientific research journal. – 2023. – Т. 16. – №. 2. – С. 107-120.

23. Пыяевна P. U. et al. MODERN TRENDS IN TREATMENT SICK MICROSPORIA //World scientific research journal. – 2023. – Т. 16. – №. 2. – С. 98-106.

24. Kholikovich E. S. et al. APPLICATION OF" BETASALIK" OINTMENT IN THE THERAPY OF CHRONIC INFLAMMATORY AND ALLERGIC DERMATOSES //Journal of new century innovations. – 2023. – Т. 31. – №. 3. – С. 56-62.

25. Мансур Т. М., Вохидов Ж. Ж. СОВРЕМЕННЫЕ МЕТОДЫ ЛЕЧЕНИЯ БОЛЕЗНИ ВИТИЛИГО //SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM. – 2023. – Т. 2. – №. 14. – С. 234-244.

26. Мансур Т. М., Вохидов Ж. Ж. СОВРЕМЕННОЙ МЕТОДЫ АЛОПЕЦИЯ ДИАГНОСТИКА И ЛЕЧЕНИЕ //SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM. – 2023. – Т. 2. – №. 14. – С. 225-233.

27. Толибов М. М. и др. ОПТИМИЗАЦИЯ К ЛЕЧЕНИЮ ТЯЖЕЛЫХ ОБОЖЖЕННЫХ БОЛЬНЫХ //SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM. – 2023. – Т. 2. – №. 14. – С. 190-199.



28. Абдуллаев Д. М., Тошев С. У., Толибов М. М. КОМПЛЕКСНЫЙ МЕТОД ЛЕЧЕНИЯ ВУЛЬГАРНЫХ УГРЕЙ //Актуальные аспекты медицинской деятельности. – 2021. – С. 254-256.

29. Абдуллаев Х., Толибов М. Allergodermatozlar bilan bog‘liq bo‘lgan vulgar asneni kompleks davolash Samaraligini o‘rganish //Журнал гепатогастроэнтерологических исследований. – 2021. – Т. 2. – №. 3.2. – С. 73-74.

## ENZYME IMMUNOASSAY FOR SERORESISTANT SYPHILIS VARIANTS

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**Abstract:** *Enzyme immunoassay (ELISA) is one of the modern serological tests for syphilis and is used to diagnose both current and past syphilitic infection. The determination of antitreponemal IgG and IgM is of crucial importance for the diagnosis of early forms of congenital syphilis, differential diagnosis of reinfection-relapses, as well as for the study of the causes of seroresistance.*

**Keywords:** *Immunoassay, syphilis.*

**Introduction:** Syphilis is characterized by a fairly high number of patients, medical and social significance, difficulties in diagnosis and treatment. In the 90s, the fifth "wave" of the syphilis epidemic began in Russia, coinciding with unfavorable

socio-economic factors, the growth of prostitution, and the abolition of legislative acts on the control and prevention of sexually transmitted infections. In 1991, the incidence of syphilis in the country per 100 thousand population was 7.2, and in 1997 it was 277.3, i.e. it increased 38.5 times, reaching its peak! In subsequent years, there was a gradual decrease in the incidence, however, and in 2013 the indicator is still high - 28.9. In 1997-2013, the incidence of syphilis in the country is 4 times higher than the initial 1991. It is natural that during the period of an increase in the incidence of syphilis, its early forms – Lues I and Lues II recens (or as it is customary to say today – secondary syphilis with a prescription of up to 6 months) prevail, with a decrease – hidden as early - with a prescription of up to 2 years, and later - more than 2 years. Latent forms of infection (both early and especially late) are insidious because they are a reservoir of possible neurosyphilis, its visceral forms. The second reservoir of these crippling forms of syphilis are patients with seroresistance. Currently, seroresistance is understood as the state of the body, which is characterized by the absence of a decrease in the titers of reagins in the RMP (microprecipitation reaction) by 4 times or more within a year after the end of full-fledged specific treatment of syphilis. What has contributed to the increase in such a contingent of people since 1995? The epidemic of syphilis in the country required the transition to outpatient treatment of patients with this infection. Due to the lack of own research, registration of foreign benzatin-benzylpenicillin (extensillin, retarpen) was carried out, which allowed this transition to be made after the publication of the "Information Letter" in 1995. This official document allowed all infectious forms of syphilis (Lues I, Lues II, Lues latens praecox) to be treated with these reparations, including pregnant women. Of course, treatment with benzatin-benzylpenicillin has played a positive role in the fight against the epidemic. However, in the future, cases of seroresistance began to appear and most often in patients with Lues II recidiva and with Lues latens praecox. In our opinion, back in that distant 1998, the treatment of the above-mentioned forms of syphilis with durant drugs should have been banned in Russia. Nowadays, it should be remembered that seroresistance is dangerous in its consequences. When performing a spinal

puncture in this category of persons, changes in the cerebrospinal fluid (positive serological reactions, increased protein content, cytosis), combined with neurological symptoms, make it possible to establish neurosyphilis in about half of the patients.

**The aim of the study** was to determine the frequency of detection of antitreponemal IgG and Ig M in seroresistant syphilis.

**Material and methods of research:** The blood sera of 25 patients (14 men and 11 women) were examined, in whom serological reactions remained positive after the end of treatment. The main age category was a group of patients aged 20 to 40 years - 12 people, 8 patients aged 40 to 50 years, 5 patients aged 50 to 60 years. The ELISA procedure was performed according to the instructions for use attached to the test system (TS), the optical density of the samples was recorded using a flatbed spectrophotometer (Multiscan, Finland).

In terms of reaction mechanism, sensitivity and specificity, ELISA is close to immunofluorescence (RIF) reactions. The participation of the same antibodies in these reactions, a close titer level, and a high frequency of matching results were noted. Therefore, the results of Ig M-ELISA were compared with DAC and RIBT

**Results:** To detect IdM in people with seroresistance, it is advisable to use test systems characterized by high sensitivity in the late stages of syphilis. It is not recommended to use test systems designed only for early diagnosis of syphilis to detect IdM in people with seroresistance. Since according to the literature, the sensitivity of such test systems in seroresistant syphilis is about 6%. The results of ELISA in the group of patients with seroresistant syphilis are in good agreement with the ideas of suppressing the expression of IdM after adequate specific therapy while maintaining the synthesis and circulation of Ig G in the blood.

It should be noted that all 25 sera were IgM negative, but IgG- positive with varying degrees of optical density (OP). 18 samples had OP above 1.0 and 7 samples had OP below 1.0 Traditional serological tests were positive.

**Conclusion:** One of the main measures aimed at preventing an increase in the incidence of syphilis is the early diagnosis of this infection. Due to the development of

more sensitive, specific and less time-consuming serological methods, the use of ELISA has become possible, as well as its use for confirmation in patients with seroresistance in syphilis.

#### LITERATURE:

1. Iskandarovna K. M. SIFILISNING IMMUNOASSAY SHAKLLARI //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – С. 534-536.

2. Iskandarovna K. M., Dilshodovna A. D., Adxamovna A. A. Impact of Socio-Hygienic Conditions of Life on the Health of Students //Central Asian Journal of Medical and Natural Science. – 2022. – Т. 3. – №. 5. – С. 644-646.

3. Iskandarovna K. M. et al. Comprehensive Assessment of the Levels of Somatic Health and Disturbances of Adaptation Reserves in Medical Students //Central Asian Journal of Medical and Natural Science. – 2022. – Т. 3. – №. 5. – С. 641-643.

4. Iskandarovna K. M., Alamovich K. A., Rabbimovich N. A. Treatment of Urethrogenic Prostatitis Associated with Chlamydia Infection //TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIIY JURNALI. – 2021. – Т. 1. – №. 5. – С. 44-46.

5. Iskandarovna K. M., Buribaevna I. S., Azamovna A. N. Immunoassay Forms of Syphilis //TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIIY JURNALI. – 2021. – Т. 1. – №. 5. – С. 47-49.

6. Ахмедова М. М., Абдуллаев Х. Д., Камолова М. И. ОЦЕНКА ЭФФЕКТИВНОСТИ МЕТОДОВ ЛЕЧЕНИЯ ОНИХОМИКОЗОВ У ВЗРОСЛЫХ //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – Т. 2. – №. 3. – С. 186-190.

7. Абдуллаев Д. М., Абдуллаев Х. Д., Камолова М. И. ОПЫТ ПРИМЕНЕНИЯ КРЕМАТЕРБИЗИЛ ПРИ ЛЕЧЕНИИ МИКОЗОВ //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – Т. 2. – №. 3. – С. 181-185.

8. Davlatovich A. X. VAGINAL TRIXOMONADLAR SHTAMMASINI TRIXOPOLGA VA XIMOTRIPSIN BILAN BILAN SEZGICHLIGINI ANIQLASH //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – C. 645-647.
9. Davlatovich A. X., Orifovich S. D., Baxtiyorovich A. S. Studying the Relationship of Local Immune Status and the Course of Burn Disease //Central Asian Journal of Medical and Natural Science. – 2022. – T. 3. – №. 5. – C. 679-682.
10. Xolmurodovich D. J., Umidovich N. T., Davlatovich A. X. CLINIC COURSE OF NONSPECIFIC PNEUMONIA //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – C. 510-513.
11. Абдуллаев Х. Д. и др. ЛАЗЕР В ЛЕЧЕНИИ ВИТИЛИГО //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – C. 495-500.
12. Hikmatovich I. N. et al. The use of Fungite in the Local Treatment of Genital Herpes //International Journal of Innovative Analyses and Emerging Technology. – 2021. – T. 1. – №. 5. – C. 231-232.
13. Davlatovich A. X., O'gli A. B. X., O'gli I. A. S. BOLALARDA GENITAL GERPESNI DAVOLASH SAMARADORLIGINI BAHOLASH //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – C. 367-369.
14. Xolmurodovich D. J., Orifovich R. S., Davlatovich A. X. FEATURES OF THE MICROELEMENT STATUS FOR THE DEVELOPMENT OF ATOPIC DERMATITIS IN CHILDREN //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – C. 447-450.
15. Davlatovich A. X. DETERMINATION OF GENE ACTIVITY IN VITILIGO PATIENTS //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – C. 451-454.
16. Davlatovich A. X. et al. EVALUATION OF THE GENERAL SOMATIC STATUS OF PATIENTS WITH VITILIGO BASED ON THE DETERMINATION

OF THE CONTENT OF NATURAL ANTIBODIES TO VARIOUS ORGANIS AND TISSUES OF THE BODY //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – C. 472-476.

17. Davlatovich A. X. et al. USING IMMUNOMAX AND 0.1% TACROLIMUS OINTMENT IN THE TREATMENT OF VITILIGO //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – C. 559-562.

18. Tolibov M. M., qizi Buronova F. Z. MAHALLIY OZON TERAPIYASINI QO ‘LLAGAN HOLDA KOMPLEKS DAVOLASH FONIDA YOSH ERKAKLARDA SURUNKALI URETROGEN PROSTATIT (CUP) KECHISHINI O ‘RGANISH //Educational Research in Universal Sciences. – 2024. – T. 3. – №. 1. – C. 417-421.

19. Tolibov M. M., Shodmonova M. A. BOLALARDA ATOPIK DERMATIT (AD) PATOGENEZIDA GENETIK OMILLARNING ROLINI BAHOLASH VA IMMUNOLOGIK PARAMETRLARGA QARAB ANIQLANGAN POLIMORFIZMLARNING PROGNOZIK AHAMIYATINI ANIQLASH //Educational Research in Universal Sciences. – 2024. – T. 3. – №. 1. – C. 406-410.

20. Tolibov M. M. et al. ATOPIK DERMATITNI DAVOLASHDA LAZER TERAPIYASINING SAMARADORLIGI //Educational Research in Universal Sciences. – 2024. – T. 3. – №. 1. – C. 286-289.

21. Utayev A. J., Tolibov M. M., Axmedova M. M. MANAGEMENT APPROACHES FOR CHRONIC URETHROGENIC PROSTATITIS //Modern Scientific Research International Scientific Journal. – 2024. – T. 2. – №. 1. – C. 151-156.

22. Makhmudovich T. M. ATOPIC DERMATITIS INCIDENT LEVEL, DIAGNOSTIC CRITERIA AND PROGNOSTIC IMPORTANCE //JOURNAL OF APPLIED MEDICAL SCIENCES. – 2023. – T. 6. – №. 4. – C. 158-168.

23. Толибов М. М. СОВРЕМЕННОЕ СОСТОЯНИЕ ПРОБЛЕМ ЭПИДЕМИОЛОГИИ, МИКРОБИОЛОГИИ И ТЕРАПИИ АКНЕ (ОБЗОР



ЛИТЕРАТУРЫ) //SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM. – 2023. – Т. 2. – №. 14. – С. 215-224.

24. Пыяевна P. U. et al. DERMATOSCOPIC PAINTING SOME COMMON DERMATOSES //World scientific research journal. – 2023. – Т. 16. – №. 2. – С. 107-120.

25. Пыяевна P. U. et al. MODERN TRENDS IN TREATMENT SICK MICROSPORIA //World scientific research journal. – 2023. – Т. 16. – №. 2. – С. 98-106.

26. Kholikovich E. S. et al. APPLICATION OF" BETASALIK" OINTMENT IN THE THERAPY OF CHRONIC INFLAMMATORY AND ALLERGIC DERMATOSES //Journal of new century innovations. – 2023. – Т. 31. – №. 3. – С. 56-62.

27. Мансур Т. М., Вохидов Ж. Ж. СОВРЕМЕННЫЕ МЕТОДЫ ЛЕЧЕНИЯ БОЛЕЗНИ ВИТИЛИГО //SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM. – 2023. – Т. 2. – №. 14. – С. 234-244.

28. Мансур Т. М., Вохидов Ж. Ж. СОВРЕМЕННОЙ МЕТОДЫ АЛОПЕЦИЯ ДИАГНОСТИКА И ЛЕЧЕНИЕ //SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM. – 2023. – Т. 2. – №. 14. – С. 225-233.

29. Толибов М. М. и др. ОПТИМИЗАЦИЯ К ЛЕЧЕНИЮ ТЯЖЕЛЫХ ОБОЖЖЕННЫХ БОЛЬНЫХ //SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM. – 2023. – Т. 2. – №. 14. – С. 190-199.

30. Абдуллаев Д. М., Тошев С. У., Толибов М. М. КОМПЛЕКСНЫЙ МЕТОД ЛЕЧЕНИЯ ВУЛЬГАРНЫХ УГРЕЙ //Актуальные аспекты медицинской деятельности. – 2021. – С. 254-256.

## STUDYING THE SENSITIVITY OF N.GONORRHOEAE TO ANTIMICROBIAL DRUGS

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***Annotation:** This article attempts to reveal the main reasons for the use of antibiotic-resistant strains of the causative agent of gonococcal infection as one of the directions for the formation of a national collection of pathogenic microorganisms. To carry out scientific work, the author conducted an experiment on where viable strains of N.gonorrhoeae obtained as part of the program for monitoring the antibiotic resistance of STI pathogens in the territory. Verification, typing and sensitivity testing of N.gonorrhoeae to antimicrobial agents is carried out using a complex of microbiological and molecular biological methods. The problem in question is still little studied, therefore, requires more thorough research.*

***Key words:** n.gonorrhoeae, sensitive, typing and research.*

**Introduction:** Gonococcus (lat. Neisseria gonorrhoeae) is a species of Gram-negative diplococci of the genus Neisseria. Cause gonorrhea - anthroponotic venereal infection, characterized by purulent inflammation of the mucous membranes, often the genitourinary system. Transmission of pathogens occurs, as a rule, sexually or through

personal belongings. In 10% of infected men and 80% of infected women, the disease is asymptomatic.

Due to the common transmission routes of the pathogen, a mixed infection is possible, in which, in addition to gonococci, there are chlamydia, ureaplasma, Trichomonas, Candida fungi, herpes viruses, etc. It is known that gonorrhea with concomitant trichomoniasis is treated with great difficulty, and this is due to the fact that trichomonads - the causative agents of trichomoniasis - "absorb" gonococci and make them inaccessible to antibiotics. In addition, gonococci are capable of endocytobiosis - that is, to live and multiply inside other cells, in particular, inside blood cells - leukocytes. In such cases, after the death of gonococci, the inflammatory process can be supported by these microorganisms (post-gonorrheal diseases). Gonorrhea is often noted in patients with syphilis.

Gonococci parasitize mainly on mucous membranes lined with cylindrical or glandular epithelium (urethra, cervical canal, distal rectum, conjunctiva). Eye damage in adults occurs due to the introduction of pathogens by hand from the genitourinary organs. It is also possible to infect girls at home in violation of hygienic rules ("potty" infection, sharing a bed with a sick gonorrhea, using common personal hygiene items, such as sponges, etc.) Lesions of mucous membranes covered with stratified squamous epithelium, as well as skin lesions, rarely occur, only under special circumstances (trauma, hormonal changes in the body, immunodeficiency states). Reproducing on the surface of the epithelium, gonococci can cause its destruction and enter the superficial lymphatic and blood vessels. The time required for the penetration of gonococci into the subepithelial layer and the development of inflammation determines the duration of the incubation period: from 1-2 days to 1 month or more.

Diagnostic value has an increased content of leukocytes in the urine in the absence of any complaints. The diagnosis is considered proven only when pathogens are determined in smears or cultures

**Purpose:** Deposition, storage and use of antibiotic-resistant strains of the causative agent of gonococcal infection as one of the directions for the formation of a national collection of pathogenic microorganisms

**Materials and methods:** viable strains of *N.gonorrhoeae* obtained as part of the program for monitoring the antibiotic resistance of STI pathogens in the territory. Verification, typing and sensitivity testing of *N.gonorrhoeae* to antimicrobial agents is carried out using a complex of microbiological and molecular biological methods. For the storage of biological samples, the cryopreservation method (-80 ° C) is used, the most valuable objects of storage are duplicated in a freeze-dried state. The electronic base of the collection is maintained using the specialized program "Diam: Bank of Microorganisms", adapted to the characteristics of the storage facilities.

**Results:** The main direction of their use is the analysis of long-term trends in changes in antibiotic resistance of gonococcal pathogens, allowing to update clinical guidelines for the management of patients with this STI. Characteristics of the collection stock in terms of sensitivity to antimicrobial drugs, as well as the presence of genetic determinants of antibiotic resistance, indicates a gradual restoration of the sensitivity of *N. gonorrhoeae* to penicillins, tetracyclines, and fluoroquinolones. A stable high level of sensitivity of *N. gonorrhoeae* to third-generation cephalosporins (primarily ceftriaxone) has been shown, which determines their importance as drugs of choice for the treatment of gonococcal infection.

An in-depth analysis of *N. gonorrhoeae* deposited in the collection using targeted and whole genome sequencing technologies allows us to assess the current stage of the molecular evolution of the causative agent of gonococcal infection, which consists in the preservation of a significant proportion of multi-resistant strains in the bacterial population, which are a potential resource for the emergence of epidemically dangerous genotypes. The characterized multidrug-resistant strains are a valuable element of the collection, potentially in demand when searching for reserve drugs for the treatment of gonococcal infection.

**Conclusion:** *N. gonorrhoeae* can be considered as an element of the emerging national collection of pathogenic microorganisms, the use of which will allow assessing and preventing the risks of incurable forms of gonococcal infection.

#### LITERATURA:

1. Kholikova Gulnoz Asatovna. Kodirova Markhabo Miyassarovna. Frequency of functional constipation in children of different ages. Журнал гепатогастроэнтерологических исследований. том 3. №3 2022-08-01. Стр 38-40.

2. М.М Кодирова, Г.А Холикова. Samarqand xududida bolalarda miokarditning asosiy klinik simptomlarini uchrashi. Журнал гепатогастроэнтерологических исследований. том 3.. №3 2022-08-01. Стр 57-60.

3. Hikmatovich I. N., Xolmatovich J. A., Temirovich E. R. Application of Topical Treatment with Pimicalimus for the Treatment of Papulosis Dermatitis //Web of Semantic: Universal Journal on Innovative Education. – 2023. – Т. 2. – №. 2. – С. 24-28.

4. Hikmatovich I. N., Temirovich E. R., Toxirovich M. T. Effectiveness of Topical Therapy in the Treatment of Genital Herpes //Web of Semantic: Universal Journal on Innovative Education. – 2023. – Т. 2. – №. 2. – С. 29-33.

5. Hikmatovich I. N., Temirovich E. R., Toxirovich M. T. Local Treatment of Patients with Genital Herpes //Web of Semantic: Universal Journal on Innovative Education. – 2023. – Т. 2. – №. 2. – С. 19-23.

6. Hikmatovich I. N. Evaluation of the Efficacy of External Therapy in Sick Children with Alergodermatitis //Web of Semantic: Universal Journal on Innovative Education. – 2023. – Т. 2. – №. 2. – С. 50-54.

7. Hikmatovich I. N., Toxirovich M. T., Xolmatovich J. A. Effectiveness of Sevoran in the Treatment of Papulosis Dermatitis //Web of Semantic: Universal Journal on Innovative Education. – 2023. – Т. 2. – №. 2. – С. 40-44.

8. Hikmatovich I. N. Evaluation of the Effectiveness of Peperator Kuralimus in the Treatment of Patients with Atopic Dermatitis //Web of Semantic: Universal Journal on Innovative Education. – 2023. – T. 2. – №. 2. – C. 45-49.

9. Hikmatovich I. N., Temirovich E. R., Egamberdiyevich M. A. Clinical Evaluation of the Efficacy of Acne Vulgaris Laser Therapy //Central Asian Journal of Medical and Natural Science. – 2022. – T. 3. – №. 5. – C. 667-669.

10. Hikmatovich I. N., Temirovich E. R., Xolmatovich J. A. HERPIS VIRUSINI MAHALLIY DAVOLASH UCHUN VIFIRONNI QO‘LLASH //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – C. 349-351.

11. Hikmatovich I. N., Temirovich E. R., Muradovich Y. M. O‘SMIRLARDA YUZAKI PYODERMANI DAVOLASHDA TOPIKAL TERAPIYA //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – C. 355-358.

12. Hikmatovich I. N., Temirovich E. R., Xolmatovich J. A. BOLALAR DERMATOZINI DAVOLASHDA MAHALLIY TERAPIYA SAMARALIGINI BAHOLASH //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – C. 352-354.

13. Qobilov E. E. et al. ANAMNEZIDA BROXOBSTRUKTIV SINDROMNI O‘TKAZGAN BOLALARDA BRONXIAL ASTMA KASALLIGINING BOSHQARILADIGAN PREDIKTORLARI //Scientific Impulse. – 2022. – T. 1. – №. 2. – C. 428-434.

14. Уралов Ш. М. и др. Методы лечения острого стенозирующего ларинготрахеита у детей на современном этапе //Scientific impulse. – 2022. – T. 1. – №. 2. – C. 19-28.

15. Hikmatovich I. N., Xolmatovich J. A., Axtamovna A. F. Applications of Elidel for Lichen Plane //Texas Journal of Medical Science. – 2022. – T. 8. – C. 113-115.

16. Ачилова Ф. А., Жалилов А. Х. ДАННЫЕ ЭХОКАРДИОГРАФИИ ПРИ МАЛЫХ АНОМАЛИЙ СЕРДЦА У ДЕТЕЙ //E Conference Zone. – 2022. – С. 136-140.

17. Жалилов А. Х., Ачилова Ф. А. ЖЕЛЕЗОДЕФИЦИТНАЯ АНЕМИЯ У ДЕТЕЙ И ЕЁ ЛЕЧЕНИЕ //E Conference Zone. – 2022. – С. 123-127.

a. Kh J. A., Sh M. U., Achilova F. A. The state of the erythron system in acute pneumonia in children. – 2022

18. Islamov N. H., Jalilov A. X., Achilova F. A. IJTIMOIIY-GIGIENIK TURSHIY SHARTLARNING O ‘QUVCHILAR SALOMATLIGIGA TA’SIRI //Educational Research in Universal Sciences. – 2023. – Т. 2. – №. 14. – С. 314-318.

19. Islamov N. H. et al. PRINCIPLES OF TREATMENT OF LARYNGOTRACHEITIS IN CHILDREN //Modern Scientific Research International Scientific Journal. – 2023. – Т. 1. – №. 7. – С. 136-142.

20. Islamov N. H., Jalilov A. X., Achilova F. A. DEVELOPMENT OF PAPILOMAVIRUS INFECTION IN MEN //Modern Scientific Research International Scientific Journal. – 2023. – Т. 1. – №. 7. – С. 128-135.

a. Ачилова Ф., Ибатова Ш., Абдукадилова А. ЕХОКАРДИОГРАФИЯ ВО‘УИЧА БОЛАЛАРДА КИЧИК YURAK АНОМАЛИЯЛАРИНИНГ ТАРҚАЛИШИ //Международный журнал научной педиатрии. – 2022. – №. 5. – С. 11-15

21. Пулатов Х. Х. и др. Влияние экспериментального сахарного диабета на надпочечники : дис. – Ўзбекистон, Самарқанд, 2022.

22. Каримова Н. А. и др. НАРУШЕНИЕ ФИЗИЧЕСКОГО РАЗВИТИЯ У ПОДРОСТКОВ И ОСЛОЖНЕНИЯ РЕПРОДУКТИВНОЙ ПАТОЛОГИИ //Новый день в медицине. – 2021. – №. 1. – С. 199-202.

23. Hikmatovich I. N., Temirovich E. R., Muradovich Y. M. O‘SMIRLARDA YUZAKI PYODERMANI DAVOLASHDA TOPIKAL TERAPIYA //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIIY JURNALI. – 2022. – С. 355-358.



24. Oblakulovich K. S. et al. The Thymus gland (Thymus) aspects in children (review of literature) //Central Asian Journal of Medical and Natural Science. – 2022. – T. 3. – №. 2. – C. 9-16.
25. Tolibov M. M., qizi Buronova F. Z. MAHALLIY OZON TERAPIYASINI QO‘LLAGAN HOLDA KOMPLEKS DAVOLASH FONIDA YOSH ERKAKLARDA SURUNKALI URETROGEN PROSTATIT (CUP) KECHISHINI O‘RGANISH //Educational Research in Universal Sciences. – 2024. – T. 3. – №. 1. – C. 417-421.
26. Tolibov M. M., Shodmonova M. A. BOLALARDA ATOPIK DERMATIT (AD) PATOGENEZIDA GENETIK OMILLARNING ROLINI BAHOLASH VA IMMUNOLOGIK PARAMETRLARGA QARAB ANIQLANGAN POLIMORFIZMLARNING PROGNOSTIK AHAMIYATINI ANIQLASH //Educational Research in Universal Sciences. – 2024. – T. 3. – №. 1. – C. 406-410.
27. Tolibov M. M. et al. ATOPIK DERMATITNI DAVOLASHDA LAZER TERAPIYASINING SAMARADORLIGI //Educational Research in Universal Sciences. – 2024. – T. 3. – №. 1. – C. 286-289.
28. Utayev A. J., Tolibov M. M., Axmedova M. M. MANAGEMENT APPROACHES FOR CHRONIC URETHROGENIC PROSTATITIS //Modern Scientific Research International Scientific Journal. – 2024. – T. 2. – №. 1. – C. 151-156.
29. Makhmudovich T. M. ATOPIC DERMATITIS INCIDENT LEVEL, DIAGNOSTIC CRITERIA AND PROGNOSTIC IMPORTANCE //JOURNAL OF APPLIED MEDICAL SCIENCES. – 2023. – T. 6. – №. 4. – C. 158-168.
30. Толибoв М. М. СОВРЕМЕННОЕ СОСТОЯНИЕ ПРОБЛЕМ ЭПИДЕМИОЛОГИИ, МИКРОБИОЛОГИИ И ТЕРАПИИ АКНЕ (ОБЗОР ЛИТЕРАТУРЫ) //SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM. – 2023. – T. 2. – №. 14. – C. 215-224.
31. Иляевна P. U. et al. DERMATOSCOPIC PAINTING SOME COMMON DERMATOSES //World scientific research journal. – 2023. – T. 16. – №. 2. – C. 107-120.

32. Ilyayeva P. U. et al. MODERN TRENDS IN TREATMENT SICK MICROSPORIA //World scientific research journal. – 2023. – Т. 16. – №. 2. – С. 98-106.

33. Kholikovich E. S. et al. APPLICATION OF" BETASALIK" OINTMENT IN THE THERAPY OF CHRONIC INFLAMMATORY AND ALLERGIC DERMATOSES //Journal of new century innovations. – 2023. – Т. 31. – №. 3. – С. 56-62.

34. Мансур Т. М., Вохидов Ж. Ж. СОВРЕМЕННЫЕ МЕТОДЫ ЛЕЧЕНИЯ БОЛЕЗНИ ВИТИЛИГО //SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM. – 2023. – Т. 2. – №. 14. – С. 234-244.

35. Мансур Т. М., Вохидов Ж. Ж. СОВРЕМЕННОЙ МЕТОДЫ АЛОПЕЦИИ ДИАГНОСТИКА И ЛЕЧЕНИЕ //SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM. – 2023. – Т. 2. – №. 14. – С. 225-233.

36. Толибов М. М. и др. ОПТИМИЗАЦИЯ К ЛЕЧЕНИЮ ТЯЖЕЛЫХ ОБОЖЖЕННЫХ БОЛЬНЫХ //SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM. – 2023. – Т. 2. – №. 14. – С. 190-199.

## BOSHLANG'ICH SINF ONA TILI DARSLARIDA SO'Z TARKIBI VA YASALISHINI O'QITISHNING MUHIM AHAMIYATLARI

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***Annontatsiya:** Boshlang'ich sinflarda ona tili fanini o'qitish o'quvchilarni o'zbek tilining imlosi, talaffuzi va o'qilishini o'rganishda muhim bosqichlardan biri hisoblanadi. Shu bois, ushbu maqola ona tili darslarida so'z tarkibi va yasalishini o'rganishga bag'ishlangan.*

***Kalit so'zlar:** morfema, leksema, lisoniy birlik, leksik ma'no, o'zak va affiksial morfema. Ona tili — har bir elatning, xalqning, millatning o'z tili. Ona tili lug'at tarkibi, asosan, shu tilga mansub xalqning turmushi, madaniyati va an'analarini ifodalaydigan so'z va tushunchalardan iborat bo'ladi. Ona tili taraqqiyoti har bir elat, xalq va millatning ijtimoiy rivojlanishi bilan uzviy bog'liq.*

**KIRISH.** Morfema (yunoncha: morphe — shakl) — o'ziga xos shakl va ma'noga ega bo'lgan, boshqa ma'noli qismlarga bo'linmaydigan, so'z (leksema) yasash yoki so'zning shaklini hosil qilish uchun xizmat qiladigan lisoniy birlik. Morfemalar o'zbek tilida, asosan, affiks holatida bo'ladi. Masalan, -chi (kurashchi), -shunos (siyosatshunos), -q (taroq), -ki (tepki), -li (aqlli), -chan (ishchan), -la (tuzla), -illa (taqilla), -lar (bolalar), -roq, (kattaroq), -mtir (qoramtir) va hokazo. So'zning leksik ma'nosini aniqlash maqsadida uni morfemalarga ajratish til haqidagi fanda o'zining nazariy asosiga ega. Morfema - so'zning eng kichik, bo'linmaydigan ma'noli qismi. Morfema ikki turga bo'linadi:

1. O'zak morfema - so'zda albatta qatnashadigan va leksik ma'no anglatadigan morfema.

2. Affiksial morfema - mustaqil holda leksik ma'no anglatmay, so'zning leksik va

grammatik ma'nolari shakllanishi uchun xizmat qiladigan morfema. Masalan, gullarni, gulla so'zlaridagi gul - o'zak morfema, -lar, -ni, -la affiksial morfemadir.

Affikslar (qo'shimchalar) ikki turga bo'linadi:

1. So'z yasovchi qo'shimchalar. Ular so'zning leksik ma'nosini shakllantirish uchun xizmat qiladi. Masalan, bog'bon, paxtakor, gulzor, ishchi so'zlaridagi -bon, -kor, -zor, -chi so'z yasovchi affikslardir.

2. Shakl yasovchi qo'shimchalar. Bu qo'shimchalar so'zlarni grammatik jihatdan shakllantirib, turli grammatik ma'nolarni ifodalaydi. Masalan, maktablarimizni so'zida -lar, -imiz, -ni shakl yasovchi qo'shimchalar bo'lib, -lar ko'plik ma'nosini, -imiz egalikning I shaxs ko'plik ma'nosini, -ni tushum kelishigi ma'nosini ifodalaydi. Morfemalarning qo'shilishi bir-biriga ta'sir qiladi, bundan tashqari, ko'pgina o'zak va so'z yasovchi qo'shimchalar ko'p ma'noli. Shunga qaramay, ko'p so'zlarning leksik ma'nosini uning morfemik tarkibiga qarab aniqlash qiyin, bu maqsadda so'zni morfemalarga ajratishdan foydalanishga to'g'ri keladi. O'quvchilar so'zning morfemik tarkibini va so'z yasalishini o'rganishlariga qarab, so'zni morfemalarga ajratishdan ongli foydalana boshlaydilar. Ular yasama so'zlarning leksik ma'nosini so'zlarning semantik o'xshashligiga qarab bilib oladilar.

### **ADABIYOTLAR TAHLILI VA METODOLOGIYA**

So'zlarning morfemik tarkibi ustida ishlashning ahamiyati va shunga mos ravishda o'qituvchining vazifalariga quyidagilar kiradi:

1. So'zning morfemik tarkibi ustida ishlash bilan o'quvchilar so'zning leksik ma'nosini aniqlashning asosiy usullaridan birini bilib oladilar. Bunda o'qituvchining vazifasi o'quvchilar so'zlarning leksik ma'nosi va morfemik tarkibi bir-biriga bog'liqligini bilib olishi uchun eng qulay sharoit yaratish, shu asosda ularning lug'atiga aniqlik kiritishga maqsadga muvofiq rahbarlik qilish hisoblanadi.

2. So'z yasalishi haqidagi elementar bilim ham o'quvchilarning tilimizning yangi so'zlar bilan boyishining asosiy manbasini tushunishlari uchun muhimdir. Yangi so'z tilda mavjud bo'lgan morfemalardan, ma'lum usul va modellar asosida vujudga keladi (yasaladi). So'z yasalishini kuzatish o'quvchilarda so'zga faol munosabatni

shakllantirishga ijobiy ta'sir etadi, tilning rivojlanish qonuniyatlarini tushunishga olib keladi.

3. So'z yasalishi asoslari bilan tanishish o'quvchilar lug'atini atrof-muhit haqidagi bilimlar bilan boyitishga imkon beradi. Predmet, jarayon, voqea-hodisalar haqidagi tushunchalar so'z bilan ifodalanadi. So'zlar o'rtasidagi ma'no va tuzilish jihatidan bog'lanishni belgilash o'zaro munosabatda bo'lgan tushunchalar o'rtasidagi bog'lanishga tayanadi (masalan, traktor va traktorchi so'zlari o'zaro munosabatda bo'lgan tushunchalar, shu tufayli ma'no va tuzilishiga ko'ra bog'langan). O'quvchilar so'zlarning ma'no va tuzilishiga ko'ra o'zaro munosabatini haqiqatan bilsalar, atrof-muhitda mavjud bo'lgan predmetlar, jarayonlar, voqealar o'rtasidagi bog'lanishni chuqur tasavvur etadilar, biladilar.

So'zda morfemaning ahamiyatini anglash, shuningdek, qo'shimchalarning semantik ma'nosini bilish o'quvchilarda nutqning aniq shakllanishiga ta'sir etadi. O'qituvchining vazifasi o'quvchilarning so'zning leksik ma'nosini tushunibgina qolmay, kontekstda aniq qo'shimchali so'zlardan ongli foydalanishlarini ham o'rgatish hisoblanadi. So'zning morfemik tarkibini o'rganish imloviy malakalarni shakllantirishda ham katta ahamiyatga ega. Fonetik tamoyil yangi o'zbek imlosining yetakchi tamoyili bo'lib, bunga binoan so'zlar va ularning tarkibiy qismi (o'zak va qo'shimchalar) ko'proq talaffuziga muvofiq yoziladi. O'zak va qo'shimchalami to'g'ri yozish malakasini nazariy asosda shakllantirish fonetik, so'z yasalishiga oid, grammatik bilimlarni maqsadga muvofiq tatbiq etishni talab qiladi. SHuning uchun so'zning morfemik tarkibini o'rganishning muhim vazifalaridan biri o'zak va qo'shimchalarni to'g'ri yozish malakasini shakllantirish uchun zarur bo'lgan bilim va ko'nikmalar asosini yaratish hisoblanadi. So'zning morfemik tarkibini o'rganish o'quvchilarning aqliy qobiliyatini o'stirishda, xususan, til birligi sifatida so'zni ongli bilib olish uchun zarur bo'lgan maxsus aqliy ko'nikmalarni shakllantirishda ham ahamiyatli. O'qituvchining vazifasi ta'lim jarayonida bilimni o'zlashtirish bilan o'quvchilarda aqliy faoliyatni o'stiradigan, analiz, taqqoslash ko'nikmalarini shakllantiradigan sharoit yaratish hisoblanadi.

## MUHOKAMA VA NATIJALAR

Boshlang'ich sinf ona tili darslarida o'quvchilarga so'z tarkibi va yasalishini o'rgatishda quyidagi metodikadan foydalanish maqsadga muvofiq. Boshlang'ich sinflar ona tili dasturiga muvofiq so'zning morfemik tarkibi III sinfda o'rganiladi. IV sinfda so'z turkumlarini o'rganish bilan bog'liq holda so'zning tarkibi haqidagi bilimlarni takomillashtirish ko'zda tutiladi. Avvalo, til materialini o'rganish tizimi nimaligini aniqlab olish zarur. Til materialini o'rganish tizimi deganda aniq, ilmiy asoslangan izchillikdagi va o'zaro bog'lanishdagi bilimlar yig'indisini o'zlashtirishni ta'minlaydigan maqsadga qaratilgan jarayon, shuningdek, shu asosda amaliy ko'nikmalarni shakllantirish tushuniladi. So'zning morfemik tarkibiga tatbiq qilganda, tizim so'z yasalishiga oid va grammatik bilimlarni o'zlashtirish: 1) dastur materialini o'rganish tizimida so'zning morfemik tarkibini o'rganishning o'rni bilan; 2) "o'zak", "o'zakdosh so'z", "so'z yasovchi qo'shimcha", "shakl yasovchi qo'shimcha" tushunchalari ustida ishlashdagi izchillik bilan; 3) so'zning morfemik tarkibi va so'z yasalishining o'zaro bir-biriga ta'sir qilishi bilan; 4) morfemalarni to'g'ri yozish malakasini shakllantirish ustida ishlash bilan bog'liqligini belgilab beradi.

Mavzuni o'rganishda to'rt bosqich ajratiladi:

Birinchi bosqich - so'z yasalishini o'rganishga tayyorgarlik bosqichi. Bu bosqichning vazifasi - o'quvchilarni bir xil o'zakli so'zlarning ma'no va tuzilishiga ko'ra bog'lanishini tushunishga tayyorlash. Bunday vazifaning qo'yilishiga sabab, birinchidan, so'zning ma'no va tuzilishi jihatidan bog'lanishini tushunish, o'zining lingvistik mohiyatiga ko'ra, bir xil o'zakli so'zlarni va so'z yasalishini o'zlashtirishga asos hisoblanadi.

Ikkinchi bosqich - bir xil o'zakli so'zlarning xususiyatlari va barcha morfemalarning mohiyati bilan tanishtirish. Bu bosqichning asosiy o'quv vazifasi - so'zlarning ma'noli qismlari sifatida o'zak, so'z yasovchi va shakl yasovchi qo'shimchalar bilan tanishtirish, "o'zakdosh so'zlar" tushunchasini shakllantirish, bir xil o'zakli so'zlarda o'zakning bir xil yozilishini kuzatish hisoblanadi.

Uchinchi bosqich - o'zak, so'z yasovchi va shakl yasovchi qo'shimchalarning

xususiyatlari hamda tildagi ahamiyatini o'rganish metodikasi. Bu bosqichning o'quv vazifasiga "o'zak", "so'z yasovchi qo'shimcha", "shakl yasovchi qo'shimcha" tushunchalarini shakllantirish, so'zning leksik ma'nosi bilan morfemik tarkibi o'rtasidagi bog'lanish haqidagi tasavvurlarni o'stirish, o'zakda jufti bor jarangli va jarangsiz undoshli so'zlarni to'g'ri yozish malakasini shakllantirish, nutqda so'z yasovchi qo'shimchasi bor so'zlarni ongli ishlatish ko'nikmasini o'stirish kiradi. Bu bosqichning vazifasi bir-biri bilan ma'lum bog'lanishda hal qilinadi. Masalan, so'zda har bir morfemaning ahamiyatini o'zlashtirish asosida o'quvchilar so'zning leksik ma'nosi bilan uning morfemik tarkibi o'rtasidagi bog'lanishni bilib oladilar. Barcha vazifalar bilan uzviy bog'liq holda, so'zlarning morfemik tarkibini hisobga olib, ulardan nutqda mumkin qadar aniq va ongli foydalanish vazifasi ham bajariladi. O'zakni o'rganishning xususiyatlari. "O'zak" tushunchasini shakllantirishda o'quvchilar o'zak o'zakdosh so'zlarning umumiy qismi ekani va u barcha bir xil o'zakli so'zlarning ma'nosidagi umumiylikni o'z ichiga olishi bilan tanishtiriladi.

To'rtinchi bosqich - so'z turkumlarini o'rganish bilan bog'liq holda so'zning tarkibi ustida ishlash (III-IVsinflar). So'zning morfemik tarkibini o'rganish tizimida bu bosqichning maqsadi so'z yasovchi qo'shimchaning so'z yasashdagi ahamiyati va shakl yasovchi qo'shimchaning so'z shaklini o'zgartirishdagi ahamiyati haqidagi bilimni chuqurlashtirish; o'quvchilarni ot, sifat, fe'llarning yasash xususiyatlarini tushunishga tayyorlash hisoblanadi.

## **XULOSA**

Xulosa qilib aytganda, o'quvchilarni so'z yasash xususiyatlarini tushunishga tayyorlash uchun o'qituvchi ularga muayyan bir yangi so'z qaysi so'zdan va qaysi morfema yordamida yasalganini aniqlashga qaratilgan topshiriq beradi. Masalan, o'qituvchi chegara otini aytadi va chegarani qo'riqlaydigan kishini bildiradigan o'zakdosh ot tanlashni topshiradi (chegarachi). Vazifani boshqacharoq berish ham mumkin: o'qituvchi so'zni va so'z yasovchi morfemani beradi. O'quvchining vazifasi yangi so'zni to'g'ri yasash va leksik ma'nosini tushuntirish hisoblanadi. Masalan, baliq so'zidan -chi qo'shimchasi yordamida yangi so'z yasash (baliqchi), uning leksik



ma'nosini tushuntirish, qaysi so'z turkumi ekanini aytish topshiriladi. Ikkala topshiriqda ham o'quvchilar so'zni morfemik tahlil qiladilar. Bunda o'qituvchi o'quvchilar e'tiborini hosil bo'lgan so'z qaysi morfema yordamida, qaysi so'z turkumidan yasalganiga, qanday ma'no anglatishi va qaysi so'z turkumi ekaniga qaratadi. Bunday mashqlarda tilda mavjud bo'lgan so'zlarning leksik ma'nosi bilan morfemik tarkibining o'zaro bog'liqligiga va biror so'z turkumiga xarakterli bo'lgan so'z yasalishi usuliga asoslanaladi.

### FOYDALANILGAN ADABIYOTLAR

1. <https://uz.wikipedia.org/wiki/Morfema>
2. Rafiev. Lotin yozuviga asoslangan o'zbek alifbosi va imlosi. T.: 2003.
3. G'ulomov. Ona tili o'qitish prinsiplari va metodlari. T.: O'qituvchi, 1992.
4. <https://uz.wikipedia.org/wiki/Onatili>.

## ТРАДИЦИОННЫЕ ЛЕКСИЧЕСКИЕ СРЕДСТВА ВЫРАЗИТЕЛЬНОСТИ В РУССКИХ НАРОДНЫХ СКАЗКАХ

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### ***АННОТАЦИЯ***

*Статья посвящена анализу языка русской народной сказки, с акцентом на лексическую стилистику, особенно на эпитеты. В ней исследуются различные типы эпитетов, выявляя их особенности в контексте волшебной сказки. Автор обращает внимание на особенности разных типов эпитетов в волшебной сказке.*

**Ключевые слова:** *сказка, эпитеты, формулы-прецеденты, женские и мужские персонажи, волшебные предметы*

## TRADITIONAL LEXICAL MEANS OF EXPRESSIVENESS IN RUSSIAN FOLK TALES

### ***ABSTRACT***

*The article is devoted to the analysis of the language of Russian folk tales, with an emphasis on lexical stylistics, especially epithets. It explores various types of epithets, identifying their features in the context of a fairy tale. The author draws attention to the features of different types of epithets in a fairy tale.*

**KEYWORDS:** *fairy tale, epithets, precedent formulas, female and male characters, magical objects*

Сказка - это один из разновидностей фольклорной прозы, распространенный среди различных народов и различающийся по жанрам.

Значительный вклад в определение сказочного жанра внесли известные российские ученые-фольклористы, такие как К.С. Аксаков, В.П. Аникин, А.И. Никифоров, Э.В. Померанцева, В.Я. Пропп и другие. Некоторые из их определений следует рассмотреть.

К.С. Аксаков описывал сказку как вымысел, отмечая, что это влияет как на сюжет сказки, так и на характер ее главных героев.

Э.В. Померанцева считала, что народная сказка представляет собой этическое устное художественное произведение, преимущественно прозаическое, волшебное, с элементами авантюры или бытового характера, ориентированное на использование фантазии. Последний признак выделяет сказку среди других жанров устной прозы. Сказки обычно делят на три основных типа: волшебные, бытовые и сказки о животных. Сюжеты сказок часто представляют собой необычные, удивительные, таинственные и иногда даже страшные события, их действия часто пронизаны приключенческим характером. Это создает особый сказочный сюжет, который характеризуется многоэпизодностью, завершенностью, напряженностью, четкостью и динамичностью развития событий.

Богатство и выразительность языка сказки достигается за счёт использования традиционных лексико-стилистических приёмов. Одним из таких характерных художественных средств, которые связывают сказки с другими фольклорными жанрами, являются эпитеты. Они играют важную роль в народной традиции, выражая мировоззрение народа. В каждой сказочной традиции эпитеты особенны и определяют образы героев, различные предметы и явления, отражая условия жизни и культурные особенности носителей языков.

Стали уже классическими исследования фольклорных эпитетов в трудах А.Н.Веселовского, А.А. Потебни, В.М Жимурлинского.[17, 24, 42]

Постоянный эпитет выделяется как одно из важнейших художественно-изобразительных средств языка фольклора. Исследование постоянства определения эпитета в устной народной поэзии имеет прямое отношение к

вопросам традиционности языка фольклора, а также к изучению принципов жанрово-стилистического выбора и развития его художественных приёмов.

Разнообразие постоянства эпитета может проявляться по-разному. Постоянные эпитеты часто входят в состав формульных конструкций и сами по себе являются формулами-прецедентами. По словам И.А. Разумовой, к формульным стереотипам можно отнести сочетания прилагательного с существительным, которые имеют устойчивый характер и часто используются в различных жанрах фольклора.

Результаты анализа и обобщения на основе нескольких сборников русских народных сказок показывают, что наибольшей частотностью отличаются эпитеты, характеризующие женские образы. Универсальным эпитетом является "красная (девица)", который применяется ко многим женским персонажам, включая царевен и дочерей Морского царя.

Для подчеркивания внешней красоты девушек в сказках, сказочники также используют эпитет "прекрасная". Его традиционность подтверждается его включением в имена собственные главных героинь сказок, например, Василиса Прекрасная, Елена Прекрасная.

Красота чудесных детей в сказках, таких как "Царь Салтан" и "Безручка", описывается эпитетами в форме приложения: *"по колено ноги в золоте"*, *"по локти руки в серебре"*, *"по косицам часты мелки звездочки"*, *"по колено в серебре"*, *"по грудь в золоте"*, *"во лбу светел месяц"*.

Отмеченные эпитеты выполняют как изобразительную, так и выразительную функции, однако в русских народных сказках вторая функция обычно приобретает большее значение. Это связано с тем, что через внешнее описание дается оценка изображаемым лицам, предметам и животным. Мужские персонажи в сказках обычно не характеризуются эпитетами, которые прямо указывают на их внешний вид. Вместо этого акцент делается на такие качества, как ум, сила, отвага. В тех случаях, когда внешняя привлекательность мужских

персонажей все же отмечается, используется формула "*ни в сказке сказать, ни пером описать*".

Еще одной группой традиционных эпитетов, характеризующих героев сказок, являются эпитеты, указывающие на их социальную принадлежность и экономическое положение. Среди таких эпитетов выделяются те, которые характеризуют род занятий или род деятельности героев. Например, среди героинь русских сказок мы встречаем образы дев-воительниц, богатырш-девок, цариц-девиц, таких как Марья Моревна.

Также в сказках присутствуют эпитеты, которые выделяют положительные качества и характеристики персонажей. Одними из самых универсальных из них являются "добрый" и "удалый", которые часто употребляются в сочетании со словом "молодец". Так, любой персонаж может быть назван "добрым молодцем", независимо от того, является ли он героем или его противником.

Пример такого обращения из сказки:

- "Кто таков, добрый молодец?" - "Я - Иван-царевич..."

Среди эпитетов, характеризующих чудовищ и врагов героев, наиболее традиционными являются следующие образы: *трехглавый/семиглавый змей, шестиголовое чудо-юдо, Змей Горыныч, "мужичек сам с нозоть, борода с локоть", "мужичок сам с перст, усы с семь верст", Кощей Бессмертный*. Эти эпитеты в основном служат для изобразительных целей, подчеркивая внешнюю чудовищность противников героев и их резкое отличие от обычных людей.

При описании врагов героев также встречаются оценочные эпитеты, такие как "*лютый змей*" или "*поганое чудище*".

Для описания индивидуальных черт персонажей волшебных сказок часто используются определения-прозвища, которые указывают на их чудесное или звериное происхождение. Имена-прозвища персонажей обладают богатой семантикой. Встречается множество имен-прозвищ, которые характеризуют героя через определенные смысловые ассоциации, отражающие специфику персонажа.

Имена-прозвища персонажей волшебных сказок часто отражают их характеристики или особенности. Например, царица Несмеяна носит это имя, потому что никогда не улыбалась и не смеялась. Никита Кожемяка получил свое имя из-за того, что он мял кожу и держал в руках двенадцать кож. Некоторые эпитеты-прозвища указывают на мифические детали портрета персонажа, например, *Одноглазка*, *Трехглазка*, *Баба-Яга Костяная Нога*. Существуют эпитеты, которые указывают на место действия сказочных событий. Они часто встречаются в начале сказки, создавая разграничение между сказочным миром и реальным пространством слушателя. Эти эпитеты призваны подчеркнуть условность и неопределенность места действия сказки. Например: "*За тридевять земель, в тридесятом царстве, не в нашем государстве, жил старик со старухой*".

В поисках невесты и чудесных предметов герой устремляется за тридевять земель, часто попадая в *подземные* или *подводные* царства. В этих местах встречаются *темные леса*, *заповедные луга*, *огненные реки*. Каждое место, где останавливается герой, озаменовано событием, важным для его судьбы, и характеризуется постоянными эпитетами. Например, в *чистом поле* герой ищет богатырского коня.

Эпитеты, характеризующие время, не так многочисленны. Среди них можно отметить такие, как "*доброе время*", "*красный день*", "*лютая зима*".

Также существуют эпитеты, определяющие волшебных помощников и магические предметы. Например, коня может характеризовать эпитет "*богатырский*".

В одну категорию с волшебными помощниками могут быть отнесены и волшебные предметы, причем их количество почти неисчислимо. Это могут быть орудия и средства передвижения, музыкальные инструменты, украшения и предметы домашнего обихода. Наиболее часто используемыми эпитетами для характеристики таких предметов являются: "*чудесный*", "*волшебный*",

"золотой". Например, *чудесная рубашка, волшебное зеркальце, волшебная курица, золотая рыбка, хрустальная гора.*

Волшебные предметы могут быть условно разделены на две категории: чудесные предметы, которые являются объектом поиска героя, и чудесные средства, с помощью которых герой решает трудные задачи.

Перечислим ряд чудесных предметов, которые являются объектами поисков героя: *свинка золотая щетинка, олень золотые рога, жар-птица, кот-баюн, золотые яблоки.*

Функциональность сказочных эпитетов проявляется особенно ярко при описании волшебных средств, с помощью которых герой достигает своих целей: добывает диковинки, женится на царевне или возвращает себя в свое царство. Такими традиционными волшебными средствами выступают: *скатерть-самобранка, сапоги-скороходы, ковер-самолет, шапка-невидимка, летучий корабль* и тд.

Эпитеты особенно характерны для волшебных сказок. В них оценочный момент всегда ярко выражен благодаря использованию оценочных эпитетов. Как отмечает Э.В. Померанцева: "Волшебные сказки увлекают слушателей в мир чудес, где герои сражаются при помощи чудесных помощников. Содержание и форма такой сказки должны быть необычными и чудесными. Это порождает своеобразную обрядность волшебной сказки и обогащает ее лексический состав. Традиционные лексические средства выразительности в русских народных сказках являются важным элементом их стиля и помогают создать особую атмосферу и образы.



**ЛИТЕРАТУРА**

1. Померанцева Э.В. Писатели и сказочники, М., 1988. -155с.
2. Разумова И.А. Стилистическая обрядность русской волшебной сказки. Петрозаводск: Карелия. 1991.- 255с.
3. Kamilovna E. D. Positive and negative connotations of images of women in proverbs and sayings of the russian people //Galaxy International Interdisciplinary Research Journal. – 2022. – Т. 10. – №. 3. – С. 685-689.
4. Ubaidova D. A., Ergasheva D. K. The History of the Creation of Lexicographic Dictionaries, Theoretical and Practical Ways of Development //European Journal of Research Development and Sustainability. – 2021. – Т. 2. – №. 3. – С. 29-32.
5. Эргашева Д. К. Образ женщин и мужчин в пословицах и поговорках русского народа //Yosh Tadqiqotchi Jurnal. – 2022. – Т. 1. – №. 2. – С. 203-210.

## ПРИМЕНЕНИЕ КОМПЬЮТЕРНЫХ ТЕХНОЛОГИЙ НА УРОКАХ РУССКОГО ЯЗЫКА

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### ***АННОТАЦИЯ***

*Статья посвящена вопросу использования ИКТ (информационно-компьютерных технологий) на уроках русского языка. Раскрыты приемы активизации познавательной деятельности обучающихся с применением мультимедийных технологий с целью повышения эффективности педагогического процесса в школе.*

**Ключевые слова:** информатизация системы, информационные технологии, использование ИКТ, компьютер, иллюстративно-информационный материал

Современный этап развития общества характеризуется интенсивностью и глубиной информатизации всех его институтов. Существенную роль в этом процессе играет информатизация системы образования, которая осуществляет формирование и становление членов общества в целом.

В образовании подчеркивается необходимость изменения методов и технологий обучения на всех ступенях, повышения веса тех из них, которые формируют практические навыки анализа информации, самообучения, стимулируют самостоятельную работу учащихся, формируют опыт ответственного выбора и ответственной деятельности. Возникла необходимость в новой модели обучения, построенной на основе современных информационных технологий, реализующей принципы личностно ориентированного образования. Информационные технологии,

рассматриваемые как один из компонентов целостной системы обучения, облегчают доступ к информации, открывают возможности вариативности учебной деятельности, ее индивидуализации и дифференциации, позволяют по-новому организовать взаимодействие всех субъектов обучения, построить образовательную систему, в которой ученик был бы активным и равноправным участником образовательной деятельности.

Внедрение новых информационных технологий в учебный процесс позволяет:

- 1) активизировать процесс обучения,
- 2) реализовать идеи развивающего обучения,
- 3) повысить темп урока,
- 4) увеличить объем самостоятельной работы учащихся.

Сегодня необходимо, чтобы каждый учитель по любой школьной дисциплине мог подготовить и провести урок с использованием ИКТ, так как теперь учителю представилась возможность сделать урок более ярким и увлекательным. Обучение предполагает общение на уроке как между учителем и учащимися, так и общение учащихся друг с другом. Использование ИКТ позволяет погрузиться в другой мир, увидеть его своими глазами, стать как бы участником того или иного праздника, традиции. Управление обучением с помощью компьютера приводит к повышению эффективности усвоения, активизации мыслительной деятельности учащихся. Компьютер обладает достаточно широкими возможностями для создания благоприятных условий работы по осмыслению орфографического (пунктуационного) правила. В обучающих программах могут быть использованы разнообразные формы наглядности, которые способствуют различным способам организации и предъявления теоретического материала в виде таблиц, схем, опорных конспектов и так далее. И демонстрирует не только статичную информацию, но и различные языковые явления в динамике с применением цвета, графики, эффекта мерцания, звука, пиктографии, «оживления» иллюстраций и так далее

(это качественно новый уровень применения объяснительно-иллюстративного и репродуктивного методов обучения). Использование ИКТ на уроках русского языка позволяет разнообразить формы работы, деятельность учащихся, активизировать внимание, повышает творческий потенциал личности. Построение схем, таблиц в презентации позволяет экономить время, более эстетично оформить материал. Задания с последующей проверкой активизируют внимание учащихся, формируют орфографическую зоркость. Использование кроссвордов, иллюстраций, рисунков, различных занимательных заданий, тестов, воспитывают интерес к уроку; делают урок более интересным. На уроках литературы, применение ИКТ позволяет использовать разнообразный иллюстративно-информационный материал. Использование данной технологии позволяет:

1. Значительно сэкономить время на уроке.
2. Повысить уровень наглядности в ходе обучения.
3. Внести элементы занимательности, оживить учебный процесс.

Информационные технологии значительно расширяют возможности предъявления учебной информации. Можно систематизировать, где и как целесообразно использовать информационные технологии в обучении, учитывая, что современные компьютеры позволяют интегрировать в рамках одной программы тексты, графику, звук, анимацию, видеоклипы, высококачественные фотоизображения, достаточно большие объемы полноэкранного видео, качество которого не уступает телевизионному.

Изменяется содержание деятельности преподавателя; преподаватель перестает быть просто "репродуктором" знаний, становится разработчиком новой технологии обучения, что, с одной стороны, повышает его творческую активность, а с другой - требует высокого уровня технологической и методической подготовленности. Появилось новое направление деятельности педагога - разработка информационных технологий обучения и программно-методических учебных комплексов.

**ЛИТЕРАТУРА**

1. Ubaidova D. A., Ergasheva D. K. The History of the Creation of Lexicographic Dictionaries, Theoretical and Practical Ways of Development //European Journal of Research Development and Sustainability. – 2021. – Т. 2. – №. 3. – С. 29-32.

2. Эргашева Д. МЕТОДИКА ПРИМЕНЕНИЯ ИГРОВЫХ ТЕХНОЛОГИЙ НА УРОКАХ РУССКОГО ЯЗЫКА //Current approaches and new research in modern sciences. – 2024. – Т. 3. – №. 1. – С. 77-81.

3. Kamilovna E. D. Positive and negative connotations of images of women in proverbs and sayings of the russian people //Galaxy International Interdisciplinary Research Journal. – 2022. – Т. 10. – №. 3. – С. 685-689.

4. Буриева М. ПЕДАГОГИЧЕСКИЕ УСЛОВИЯ СОВЕРШЕНСТВОВАНИЯ РАБОТЫ ПО САМООБРАЗОВАНИЮ //Current approaches and new research in modern sciences. – 2024. – Т. 3. – №. 1. – С. 61-65.

5. Буриева М. О. РАЗВИТИЕ ПОЗНАВАТЕЛЬНОГО ИНТЕРЕСА НА УРОКАХ РУССКОГО ЯЗЫКА В НАЧАЛЬНОЙ ШКОЛЕ //GOLDEN BRAIN. – 2023. – Т. 1. – №. 35. – С. 55-60.

6. Kamilovna E. D. Positive and negative connotations of images of women in proverbs and sayings of the russian people //Galaxy International Interdisciplinary Research Journal. – 2022. – Т. 10. – №. 3. – С. 685-689.

## ДЕФЕКТЫ И ПОВРЕЖДЕНИЯ ЖЕЛЕЗОБЕТОННЫХ КОНСТРУКЦИЙ КАРКАСНЫХ ЗДАНИЙ В СЕЙСМИЧЕСКИХ РАЙОНАХ

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### **АННОТАЦИЯ**

*В данной статье проводятся особенности обследования технического состояния несущих конструкций железобетонных каркасных зданий, построенных и эксплуатируемых в сейсмических районах. Обоснование возможности надежной эксплуатации таких зданий могут быть даны только после выполнения комплексных работ, которые состоят из детальных обследований для оценки их фактического напряженно – деформированного состояния. Даны рекомендации о порядке проведения технического обследования железобетонных конструкций и определению фактической прочности бетона.*

**Ключевые слова:** фундамент, колонна, ригель, перекрытие, расчет, прочность.

## DEFECTS AND DAMAGE TO REINFORCED CONCRETE STRUCTURES OF FRAME BUILDINGS IN SEISMIC AREAS

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### **ANNOTATION**

*This article discusses the peculiarities of inspecting the technical condition of load-bearing structures of reinforced concrete frame buildings constructed and operated in seismic zones. The justification for the reliable operation of such buildings can only be provided after performing comprehensive works, which consist of detailed inspections to assess their actual stress-deformed state. Recommendations are given on the procedure for conducting technical inspections of reinforced concrete structures and determining the actual strength of concrete.*

**Key words:** *foundation, column, beam, floors, calculation, strength.*

**ВВЕДЕНИЕ.** Обследование железобетонных конструкций – это исследование несущих и ограждающих конструкций, проводимое для оценки текущего технического состояния, определения степени опасности дефектов, повреждений и деформаций и необходимости проведения ремонтных и восстановительных работ.

Комплекс работ по обследованию железобетонных конструкций выполняются в соответствии с требованиями действующих нормативных документов[1,2] и технического задания согласованного заказчиком, и включает в себя следующие основные этапы.

- ознакомление с проектной и исполнительной документацией, предварительный визуальный осмотр;
- обмерно – обследовательские работы, определение геометрических параметров конструкций зданий;
- уточнение расчетно – конструкторской схемы здания;



- выяснение дефектов, повреждений и деформаций конструкций по частям здания проводится визуально;

- механические характеристики железобетонных конструкций проводится вскрытием испытаниями неразрушающими методами контроля (инструментальное детальное обследование);

- выполнение поверочных расчетов;

- разработка рекомендации по устранению выявленных дефектов, повреждений и деформаций.

ГОСТ 31937[1] устанавливает регулярность проведения обследования объектов. Согласно этому стандарту объект требуется обследовать:

- минимум через два года после ввода его в эксплуатацию;

- каждое десятилетие при стандартных условиях использования объекта;

- раз в пять лет при использовании здания неблагоприятных условиях (повышенная влажность, сейсмическая активность и др.)

**МЕТОДЫ ОБСЛЕДОВАНИЯ.** Для проведения технического обследования железобетонных конструкций применяют следующие методы: визуальный (визуальная идентификация дефектов, повреждений и деформаций), инструментальный (ультразвуковой электромагнитный, радиометрический, нейронный, электрооптический, пластическая деформация, способ отрыва с изгибом и метод сжатия).

По результатам проведенных обследований устанавливают техническое состояние конструкций и здания, которое может иметь нормативное, ограниченное и аварийное состояние. Здание в аварийном состоянии не будет эксплуатироваться до тех пор, пока оно не будет приведено в нормативное или удовлетворительное состояние. Если здание имеет ограниченное техническое состояние, то для его эксплуатации требуется ремонт, усиление, восстановление железобетонных конструкций и последующий их мониторинг [3,4,5,6].

Методика обследования железобетонных конструктивных элементов здания должна зависеть от назначения, вида реальной конструктивной схемы и

окружающей этот элемент среды.

В процессе обследования необходимо изучить инженерно – геологические и гидрогеологические условия площадки строительства, физико – механические свойства грунтов, оценить степень агрессивности вод и колебания их уровня и коррозионную активность грунтов. Для проведения указанных обследований отрывают шурфы, размещая их непосредственно у стен здания в пределах наиболее нарушенных участков и в местах неудовлетворительного состояния наземных конструкций. Минимальные размеры прямоугольных шурфов 1.0x1.2м, глубина которых принимается ниже подошвы фундаментов на 0.5м.

В шурфах отбирают образцы из под фундамента для лабораторных испытаний по определению физико - механических характеристик грунтов с нарушений и ненарушенной структурой.

При обследовании фундаментов здания определяют их тип, форму, размеры в плане, глубину заложения, выявляются дефекты и определяются прочность материалов, устанавливается класс прочности бетона, класс и диаметра арматуры, толщина защитного слоя бетона и др.

В процессе обследования фундаментов в просадочных грунтах, которые характерны для большинства регионов нашей республике, проверяют выполнение требуемых водозащитных мероприятий и их соответствие проекту.

Материалы указанных работ оформляют в виде эскизных чертежей, фотографий и описаний. В случае наличия трещины в фундаментах наносят на чертеже, указывают их расположение в пространстве, глубину, ширину раскрытия, развитие во времени.

Железобетонные колонны обследуют визуальны с помощью приборов и лабораторными методами испытаний. Выполняют замеры отклонений колонн от проектных размеров и положений (смещение осей, отклонение от вертикали, искривления и т.п). Важным моментом при обследовании железобетонных колонн является определение фактической прочности бетона в конструкции, ее устойчивость и наличие дефектов в виде продольных и поперечных трещин,

бетонирования и ржавых пятен и выпучивания арматуры.

В колоннах уточняют действующие на них нагрузки и после поверочных расчетов определяют их фактическую несущую способность.

При обследовании железобетонных ригелей (балок) необходимо обратить на следующие дефекты и повреждения: хаотично расположенные усадочные и силовые трещины, отслоение защитного слоя бетона и снижение прочности бетона, следы коррозии арматуры, недопустимое раскрытие трещин нормальных и наклонных к продольной оси, повышения прогиба по отношению к допустимой величине. Эти указанные дефекты и повреждения оценивают визуальным и инструментальным обследованиями с помощью современных приборов и инструментов.

Для всех обследуемых железобетонных конструкций определение фактической прочности бетона на момент обследования является основным для оценки их напряженно – деформированного состояния [7,8,9,10].

В процессе обследования железобетонных перекрытий обращают внимание на недостаточный защитный слой, его разделение, коррозию арматуры и бетона, поверхностные раковины и трещины.

Одним из условий эксплуатационной надежности и долговечности железобетонных перекрытий является правильность их армирования, от которого зависит прочность, жесткость и трещиностойкость железобетонных плит перекрытий.

## **РЕЗУЛЬТАТЫ**

Как известно, основным показателем прочности бетона является его прочность на сжатие, по которому устанавливают классы бетона. Обычно фактическая прочность не совпадает с проектной и начальной. Бетон изменяет свои прочностные и деформационные характеристики под нагрузкой и во времени. Это может происходить также под воздействием условий эксплуатации и случайных факторов. В процессе обследования определение фактической прочности бетона железобетонных конструкций проводятся различными

методами разрушающего и не разрушающего контроля.

В настоящее время существует ряд механических и физических методов, позволяющих определить прочность бетона в различных участках железобетонных конструкций без их разрушения. Для этого используют различные приборы и по результатам испытаний определяют среднее значение прочности (не менее 6 единичных измерений на одном участке). Коэффициент вариации определяют как отношение среднего квадратичного отклонения к среднему значению (математическому ожиданию). Для компьютерной обработки результатов испытаний составлена программа, по которой можно обработать до 200 единичных измерений. В результате неразрушающего контроля определяется прочность бетона отдельных участков (не менее 6) и средняя прочность бетона. Определив прочность бетона в каждом участке как среднюю по результатам проведенных измерений вычисляют однородность и среднюю прочность бетона в каждой конструкции. Значение этой прочности учитывается в поверочном расчете несущей способности железобетонной конструкции.

Соппротивление бетона для поверочных расчетов находят по действующим нормам проектирования железобетонных конструкций[10], исходя из значений нормативных сопротивлений, полученных неразрушающим методом по выше описанному методу. При наличии данных о фактической прочности бетона в отдельных участках железобетонных конструкций его нормативное значение вычисляют по формуле;

$$R_n = R_m - \alpha \cdot S_r ; \text{МПа} \quad (1)$$

Где;  $R_m$  – среднее значение фактической прочности бетона в железобетонных конструкции;

$S_r$  – среднее квадратическое отклонение результатов испытаний;

$\alpha$  – коэффициент, определяемый из выражения:

$$\alpha = 3/62 (1 - 2,52/n) \quad (2)$$

$n$  – число измерений ( $n \geq \min 6$ ).

В случаях, если объект обследования находился в состоянии незавершенного строительства в течение более одного года, то для определения класса бетона железобетонных конструкций необходимо учитывать влияние низкой влажности и высокой температуры внешней среды. Поочередное воздействие этих факторов способствует возникновению температурных и внутренних напряжений, а также повышенных усадочных деформаций, что в результате приводит к снижению прочности бетона. Для таких случаев определение класса прочности бетона железобетонных конструкций выполняют по следующей формуле:

$$B(t, w) = (82.97 + 37.49 \cdot t_i - 0.227 \cdot w_i - 0.189 \cdot t_i \cdot w_i) \quad (3)$$

где:

$t$  - среднее значение климатической температуры;

$w$  - то же, влажности.

Из формулы (3) определение класса бетона выполняется по следующему выражению:

$$B(t, w) = r \cdot \left( 1 - 1.94 \cdot \frac{\sum_{i=1}^n (R_i - R_{cp})^2}{n-1} \right) \quad (4)$$

$$r = \frac{B(t, w)}{\left( 1 - 1.94 \cdot \frac{\sum_{i=1}^n (R_i - R_{cp})^2}{n-1} \right)} \quad (5)$$

где:  $R_{проч} = R_{cp} + i \cdot r$ ,  $i = 1, 2, 3$ ;  $R_{проч}$  -  $R$  - искомая прочность;  $r$  - коэффициент прочности по результатам исследования;  $R_i$  - значение каждой определенной прочности;  $B(t, w)$  - значение, определенное с учетом влияния температуры и влажности;  $R_{cp}$  - среднеарифметическое значение определенной прочности.

В расчет вводят также коэффициенты условий работы бетона приведенные в нормах. В зависимости от полученного класса бетона по прочности на сжатие путем линейной интерполяции табличных значений, приведенных в нормах, определяют расчетные сопротивления бетона.

По результатам расчетов производят усиление железобетонных элементов для увеличения их несущей способности и жесткости в связи с повреждениями, полученными при возведении конструкции, эксплуатации или других отрицательных воздействиях. При этом усиление может производиться двумя основными способами:

- изменением конструктивной схемы;
- наращиванием элемента

По первому способу производят усиление элементов главным образом исправленных конструкций. По второму способу увеличивают размеры поперечного сечения элементов с добавлением арматуры и металлопроката.

Для усиления наземных конструкций следует принимать бетон класса по прочности на сжатие не менее В15 и арматуру классов А240, А300, А400, А400 в и А600.

При выполнении поверочных расчетов железобетонных конструкций по результатам обследований следует руководствоваться требованиями раздела 6 КМК 2.03.01-21[11].

Обеспечение сейсмостойкость железобетонных каркасных зданий должно выполняться в соответствии с требованиями разделов 3.2 “Каркасные здания” и 3.8 “Железобетонные конструкции” действующих норм проектирования КМК 2.01.03-19[12].

Кроме того, согласно требованиям раздела 6 “Особенности производства и контроль качества строительных работ” производят определение прочности бетона методами неразрушающего контроля с учетом вышеприведенных предложений. Поверочные расчеты зданий на особые сочетания нагрузок с учетом сейсмических воздействий с использованием материалов технического

обследования по фактической прочности бетона конструкции. При этом предельное состояние по эксплуатационной пригодности (ПС-2) не рассматривается согласно п.5.9 вышеуказанного документа.

**ЗАКЛЮЧЕНИЕ.** Обследование технического состояния железобетонных каркасных зданий, построенных в сейсмических районах, выполняется с целью оценки обоснованной возможности их дальнейшей безаварийной эксплуатации или необходимости их восстановления и усиления.

Обследование таких зданий должно быть комплексным, которое состоит из мероприятий по определению и оценке фактических значений параметров грунтов основания и железобетонных конструкций, характеризующих работоспособность объекта обследования с учетом сейсмостойкости согласно требованиям действующих норм проектирования.

Применение на практике результатов, приведенных в данной статье, позволит выполнение усилений или восстановлений железобетонных конструкций с достаточной надежностью при разработке проекта реконструкции зданий, построенных в сейсмических районах. Техническое состояние зависит от условий эксплуатации, функционального назначения, исполнения требований проектной и нормативной документации. На основе полученной информации можно оценить, в каком техническом состоянии находится объект обследования.

На основании проведенного технического обследования железобетонных конструкций и поверочных расчетов следует составлять мероприятия (антисейсмические, противопросадочные, антикоррозийные и другие), качественное выполнение которых позволяет заключить о надежном функционировании объекта в целом.



## СПИСОК ИСПОЛЬЗОВАННОЙ ЛИТЕРАТУРЫ

1. ГОСТ 31937-2011. Межгосударственный стандарт “Здания и сооружения”. Правила обследования и мониторинга технического состояния.
2. СП 322.1325800.2017. Здания и сооружения в сейсмических районах. Правила обследования последствий землетрясения.
3. Гроздов В.Т. Дефекты основных несущих железобетонных конструкций каркасных многоэтажных промышленных и общественных зданий методы и устранения. СПб // СПб.,1993-192с.
4. Калинин А.А. Обследование, расчет и усиление зданий и сооружений. Учебное пособие. М., Издательство АСВ, 2004.-160с.
5. Давидюк А.А., Румянцев И.М. Контроль прочности конструкций из высокопрочного бетона на стадии эксплуатации высотных зданий. Строительные материалы 2018. ГОСТ 18105 -2010. Бетоны.
6. Снежков Д.Ю., Леонович С.Н., Ким Л.В. Мониторинг железобетонных конструкций на основе неразрушающих испытаний бетона: методы контроля, критерии соответствия. Вестник инженерной школы ДВФУ, 2015,№1(12). Строительные материалы и изделия.
7. Парфенов А.А., Сивакова Щ.А., Гусарь Щ.А., Балакирева В.В. Выбор оптимальных методов определения прочности бетона при обследовании зданий и сооружений. //Строительные материалы. 2019, №1-2.с.60-63.
8. Мочко Анджей, Андреев В.И., Марта Мочко. Проверка качества бетона в существующих конструкциях. Технологии Европейских стандартов. 2019.
9. Давидюк А.А., Румянцев И.М. Контроль прочности конструкций из высокопрочного бетона на стадии эксплуатации высотных зданий. Строительные материалы 2018. ГОСТ 18105 -2010. Бетоны.
10. Yusufkhojaev, S., Yusupov, R., Alimov, X., Makhmudov, J., & Choi, E. (2023). Crack Resistance of Prestressed Reinforced Concrete Beams with Wire Rope Reinforcement. *Materials*, 16(19), 6359. <https://doi.org/10.3390/ma16196359>.

11. КМК 2.03.01-21. Бетонные и железобетонные конструкции. Министерство строительства Республики Узбекистан. Ташкент, 2021.
12. КМК 2.01.03-19. Строительство в сейсмических районах. Министерство строительства Республики Узбекистан. Ташкент, 2019.

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**LAGOCHILUS PROSKORIAKOVA – DORIVOR O‘SIMLIGINING  
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*Annotatsiya. Proskoryakova lagoxilusi – Labguldoshlar (Lamiaceae) oilasining Lagochilus turkumiga mansub bo‘lib, prof. M. I. Ikramov tomonidan tur sifatida aniqlangan. L. Proskoriakova qimmat baho dorivor o‘simlik bo‘lib, uning bargi, gul qismlari (gulkosa va gultojlari) lagoxilen moddasiga juda boy bo‘ladi. Shu sababli ilmiy tibbiyotda qon to‘xtatuvchi preparat sifatida foydalaniladi. (Bu xususiyatini birinchi marta Akanov – 1946; Ikramov – 1976; Ibragimov – 1977- yil aniqlaganlar).*

*L. Proskoriakova Pomir – Oloy tog‘- tizmasining neoendemik o‘simliklaridan hisoblanib, hozirda tabiatda ularning soni juda ham kamayib ketmoqda va shu sababli muhofazaga ehtiyoj sezgan o‘simliklardan. Bu asosan Nurota tog‘ tizmalarida, janubiy qiyaliklarida ko‘plab uchraydi.*

**Kalit soʻzlar:** *Proskoryakova lagoxil, gulkosa va gultoj, flora, Nurota togʻ, Pomir – Oloy togʻ - tizmasi, Gʻallaorol, Forish, Turkiston lolasi, navroʻzgul.*

**Kirish.** Bizning boy yovvoyi floramiz dori-darmon manbalaridan biridir. Floramizda koʻp foydali oʻsimliklar bor. Soʻngi yillar davomida yuzlab oʻzimizda uchraydigan yovvoyi oʻsimliklar oʻrganilgan.

Tabiatdagi yovvoyi holda oʻsayotgan oʻsimliklardan foydalilarini aniqlab ularning biologik va ekologik xususiyatlarini oʻrganish asosida istiqbollilariniajratib madaniylashtirish maqsadga muvofiqdir. Ular qimmat - baho, shifo - baxsh xususiyatlarga ega boʻlib, sogʻliqni saqlash amaliyotida qoʻllaniladi.

Hozirgi kunda dunyo tibbiyotida ishlatiladigan yuz ming dorivor vositalar ichida 30% ni oʻsimliklardan tayyorlanadi.

Shuni ham aytib oʻtish joyizki oʻsimlik xom – ashyolaridan tayyorlanayotgan dori – darmonlarga boʻlgan talab yildan – yilga ortib bormoqda. Darhaqiqat shunday ekan, bu talabni toʻliq qondirish uchun oʻsimlik boyliklaridan toʻgʻri va oqilona foydalanishga, ulardan dori – darmonlar tayyorlashga jiddiy eʼtibor berish kerak.

Nafaqat yangi turlarni topib, ulardan foydalanish, balkim bu turlarni tabiiy sharoitda saqlab qolish va keng tarqalishiga sharoit yaratish ham muhimdir.

Ana shunday yangi istiqbolli dorivor oʻsimliklar hisobiga lagoxilus (*Lagochilus*) turkumi turlari ham mansubdir.

**Tadqiqot natijalari va muhokamasi.** Ushbu oʻrganayotgan ishimizda *Lagochilus Proskorijakova* turi ham qimmat baho dorivorlik xususiyatiga ega boʻlib, haligacha ilmiy tibbiyotda toʻliq ishlatilgani yoʻq.

*Proskoryakova lagoxilusi* – Labguldoshlar (*Lamiaceae*) oilasining *Lagochilus* turkumiga mansub boʻlib, prof. M. I. Ikramov tomonidan tur sifatida aniqlangan. *L. Proskoriakova* qimmat baho dorivor oʻsimlik boʻlib, uning bargi, gul qismlari (*gulkosa* va *gultojlari*) *lagoxilen* moddasiga juda boy boʻladi. Shu sababli ilmiy tibbiyotda qon toʻxtatuvchi preparat sifatida foydalaniladi. (Bu xususiyatini birinchi marta Akanov – 1946; Ikramov – 1976; Ibragimov – 1977- yil aniqlaganlar).

L. Proskoriakova Pomir – Oloy tog‘- tizmasining neoendemik o‘simliklaridan hisoblanib, hozirda tabiatda ularning soni juda ham kamayib ketmoqda va shu sababli muhofazaga ehtiyoj sezgan o‘simliklardan. Bu asosan Nurota tog‘ tizmalarida, janubiy qiyaliklarida ko‘plab uchraydi.

Bu o‘simlikni yig‘ib olish mumkin bo‘lgan joy G‘allaorol, Forish rayonlarining tog‘l joylaridan olish mumkin. L. Proskoriakova tabiatda ancha murakkab o‘simliklar jamoasida o‘sadi. U o‘sadigan jamoada subdamentant hisoblanib, lagoxilus- shuvoq farmatsiyasini tashkil qiladi. Qodir Zokirov va Po‘lat Zokirovlarning Klassefikatsiyasiga ko‘ra, L. Proskoriakova termokserofitlarning gipsotermoeuksokserofitlar guruhiga kiradi (gipsli tuproqda issiq sevar o‘simliklar).

L. Proskoriakova Nurota tog‘ tizmalarini janubiy- g‘arb tomonida turli o‘simliklar assosiasiyasida tarqalgan yuqori adirda Janubiy qiyaliklarda may oyida juda ko‘p uchraydi va efimer- shuvoq assosiasiyasida qatnashadi. Tuproq tarkibiga ko‘ra o‘simliklar qoplamida Lagochilus Proskorijakovaning uchrashi ham turlicha bo‘ladi. Lagochilus o‘sadigan o‘simliklar jamoasidan dominantlik qiluvchi efimeroitlardan navro‘zgul, rang bo‘ladi.

Kam bo‘lsada bu jamoada Turkiston lolasi va navro‘zgul o‘simliklari uchraydi. Lekin hamma joyda ham bu o‘simliklarni qatnashishi son jihatidan bir xil bo‘lmasdan efimeroitlar 30% gacha ba‘zan 10-15% ni tashkil etadi. Asosan yozda vegetatsiya qiladigan o‘simliklar ko‘proq uchraydi.

Lagochilus Proskorijakova balandligi 20-35 sm keladigan yarim butacha, ildizi vertikal, ko‘p shoxlangan, poyasi ko‘p sonli, poyaning pastki qismi yog‘ochlashgan, tik o‘sgan oddiy yoki shoxlangan mustahkam bargli, silliq ba‘zan yuqori qismi mayda, so‘rg‘ichsimon tuklar bilan qoplangan, pastki qismi och pushti yoki qizil yaltiroq po‘st bilan qoplangan. Barglari rombsimon asosiy ingichka panjasimon yoki 3-5 bo‘lakli, bo‘laklari yumoloq bo‘lib uzunligi 10-12 mm, yuqoridagi barglarining uzunligi 2,5-3 mm, badda 1-2 a‘zoli o‘tiroq qoldiq tuklar bor. Barg yaprog‘ning ostki qismi bezli tuklar bilan qalin qoplangan, gullari 4-8 (10) tadan ortiq, yuqori barglar qo‘ltig‘ida o‘troq joylashgan. Gulyonbarglari mustahkam gorizantal egilgan ushburchakli,

bigizsimon, uzunchoq bezchalar bilan qoplangan, oxirgilari yalang'och. Gulkosacha barglarining uzunligi 10-15 mm qo'ng'iroqsimon, yuqoridagi bigizsimon o'tkirlashgan, uzunligi 1-1,5 mm gacha. Gulkosacha naychalari bezli yakka- yakka tuklar bilan qoplangan. Toj bargi och pushti, uzunligi 20-22 mm, pastki lablari uch bo'lakli, yuqorisi paxmoq och malla rang, tomirli. Ginetsiy toj barg naychasiga o'rtnashgan.

Iyun - iyul gullaydi, avgust oyida meva tugadi. Pomir – Oloy endimi hisoblanadi.

Bu tur *L.inebrians*dan poyasi kuchsiz egilganligi, tojbarglarining bezli yakka tuklar bilan qoplanganligi va och- pushti bo'lishi bilan farqlanadi.

**Xulosa.** Yuqorida keltirilgan ma'lumotlardan ko'rinib turibdiki bu o'simliklar tabiatda juda ham kam sonli bo'lib, ularni saqlab qolish eng muhim masalalardan bo'lib hisoblanadi. Bu o'simliklarni saqlab qolish ushuni o'sadigan joylarini muhofaza qilinadigan "Buyurtmaxonalar" tashkil qilish va ularni madaniylashtirish yo'llari bilangina saqlab qolish mumkin.

### ADABIYOTLAR RO'YHATI

1. Нормуродов. Х, Икрамов. М, А. Юлдашев – Новые лекарственные растения – Зайцегуб кштутский и зайцегуб зарафшанский. Ташкент "Меҳнат" - 1992
2. Qosimov. A . I – Dorivor o'simliklar (ma'lumotnoma) Toshkent, Ibn Sino nomidagi nashriyot- matbao birlashmasi, 1994- yil.
3. Normurodov. X – Lagochilusning (*Lagochilus. L*) xalq va ilmiy tabobatda qo'llanilishi. Xalqaro Ibn Sino jurnalida. 2002- yil.
4. Икрамов. М. И, Нормуродов. Х – Изучения запасов сырья *Lagochilus inebrians L. U. Achilliea mellefolium L.* в Самаркандской области. Растительные ресурсы.Т. 23.вып. 2. Санкт Петербург.2004.
5. Болтаев К.С., Жамалова Ф.А., Мамарасулова Н.И. Экологическое группирование нематодофауны тугайных растений . Вестник Хорезмской академии Маъмуна.№5 (79) 2021. 33-37 стр.

6. Sultonovich, B. K., Abdusalomovna, J. F., Isrofilovna, M. N., Mansurovich, U. F., & Sultanovich, K. (2022). A COMPARATIVE STUDY OF NEMATODA-FAUNA OF PASTURAL PLANTS IN FOREST BIOTOPES. *Academicia Globe: Inderscience Research*, 3 (05), 41–45.

7. Sultonovich, B. K., Abdusalomovna, J. F., Isrofilovna, M. N., Mansurovich, U. F., & Sultanovich, K. (2022). A COMPARATIVE STUDY OF NEMATODA-FAUNA OF PASTURAL PLANTS IN FOREST BIOTOPES. *Academicia Globe: Inderscience Research*, 3 (05), 41–45.

9. Одилова Г. и др. СЫВОРОТОЧНЫЕ ИММУНОГЛОБУЛИНЫ ПРИ САЛЬМОНЕЛЛЕЗНОЙ ИНФЕКЦИИ У ДЕТЕЙ //Eurasian Journal of Academic Research. – 2022. – Т. 2. – №. 11. – С. 1197-1199.

10. Boltayev K. S., Jamalova F. A., Shodiyeva D. G. MIKOZLARGA MIKROBIOLOGIK MIKROSKOPIK TASHXIS QO ‘YISHNING O ‘ZIGA XOS XUSUSIYATLARI. *GOLDEN BRAIN*, 1 (3), 35–40. – 2023.

11. Одилова, Г., Мамарасулова, Н., Саидов, С., Турдиев, Ш., Холбоев, Р., & Хамраев, Г. (2022). СЫВОРОТОЧНЫЕ ИММУНОГЛОБУЛИНЫ ПРИ САЛЬМОНЕЛЛЕЗНОЙ ИНФЕКЦИИ У ДЕТЕЙ. *Eurasian Journal of Academic Research*, 2(11), 1197-1199.

12. Одилова Г. М. и др. Клинические особенности течения ветряной оспы у взрослых в современных климатических условиях //Вопросы науки и образования. – 2019. – №. 28 (77). – С. 70-78.

13. Sh S. H., Mamarasulova N. I. ANTIBIOTIKLAR VA ANTIBIOTIKOREZISTENT LAKTOBAKTERIYALARNI BIRGALIKDA BOLALARDAGI ESHERIXIOZ KASALLIKLARNI DAVOLASHDA QO‘L-LANISHI. – 2023.

14. Sultonovich, B. K., Isrofilovna, M. N., Abdusalomovna, J. F., & Olimovna, O. P. (2022). A comparative study of nematoda facilities of shortage plants and trees in zarafshan forest biotopes. *Academicia Globe: Inderscience Research*, 3(5), 1-5.



15. Isrofilovna M. N., Qizi O. B. Q., Qizi S. M. R. ICHAK INFEKTSIYALARINING PATOGENEZI VA DIAGNOSTIKASIDA ALLERGIYANING ROLI //Talqin va tadqiqotlar ilmiy-uslubiy jurnali. – 2023. – T. 1. – №. 17. – С. 252-256.

16. Юсупов, М., Шайкулов, Х., Одилова, Г., & Мамарасулова, Н. (2023). Раннее выявление ротавирусной инфекции у детей. *Каталог монографий*, 1(1), 1-68.

17. Юсупов, М. И. (2024). ТОПОГРАФИЯ ВЕТВЕЙ ЛИЦЕВОГО НЕРВА И АСИММЕТРИЯ ЕГО ВЕТВЛЕНИЯ У ПЛОДОВ И НОВОРОЖДЕННЫХ. *INTERNATIONAL JOURNAL OF RECENTLY SCIENTIFIC RESEARCHER'S THEORY*, 2(1), 284-289.

18. Болтаев, К., Мамедов, А., Хожакулов, Д., & Мамарасулова, Н. (2024). Samarqand viloyati to 'qay sharoitida o 'suvchi yovvoyi o 'simliklar nematodalari kompleksining ekologiyasi. *Каталог монографий*, 1(1).

19. Mamarasulova, N. I., & Odilova, G. M. (2023). BERBERIS INTEGERRIMA BUNGENING IKKILAMCHI METABOLITLARINING DORIVORLIK XUSUSIYATLARI VA BIOTEKNOLOGIK AHAMIYATI. *GOLDEN BRAIN*, 1(10), 33-43.

20. Sh, S. H., & Mamarasulova, N. I. (2023). O 'TKIR DIAREYALARDA ESHERIXIYALARNING AJRALISHI.

## ZAMONAVIY TA'LIMDA RAQAMLI TEXNOLOGIYALAR VA SUN'YIY INTELLEKT TEXNOLOGIYALARIDAN FOYDALANISH

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### ANNOTATSIYA

*Jamiyat taraqqiyotining bugungi holati jamiyat hayotining barcha jabhalarini raqamlashtirish bilan chambarchas bog'liq. Bu, shuningdek, sun'iy intellekt (SI) texnologiyalari, neyron tarmoqlari va sun'iy intellektga asoslangan boshqa kiberfizik tizimlar, shuningdek, robotlar va robototexnika ob'ektlaridan malakali va puxta o'ylangan foydalanish uchun asos bo'lishi kerak bo'lgan ta'lim sohasini ham o'z ichiga oladi. Ushbu texnologiyalarning joriy etilishi o'quv jarayonini takomillashtirish uchun yangi imkoniyatlar ochadi, lekin ayni paytda darhol aniq bo'lmasligi mumkin bo'lgan muayyan xavflarni keltirib chiqaradi. Tadqiqotda turli mamlakatlarning sun'iy intellekt texnologiyalarini ta'lim tizimiga integratsiyalash tajribasi o'rganilgan. Tadqiqot natijalariga ko'ra, sun'iy intellekt texnologiyalari va ta'lim o'rtasidagi munosabatlarning uchta asosiy jihati aniqlangan. Birinchidan, ta'lim va ta'lim sifatini oshirish uchun sun'iy intellekt texnologiyalaridan foydalanish mumkin. Ikkinchidan, SI va tegishli texnologiyalar bo'yicha ilmiy va amaliy tadqiqotlarga ehtiyoj bor. Uchinchidan, SI bilan samarali ishlay oladigan malakali mutaxassislarni tayyorlash nihoyatda muhim. Maqolada mazkur texnologiyalarni ta'limga keng joriy etishga to'sqinlik qilayotgan to'siqlar ham ko'rsatilgan. Bundan tashqari, u ta'limda sun'iy intellektidan foydalanish natijasida yuzaga kelishi mumkin bo'lgan xavf va salbiy ta'sirlarga oydinlik kiritadi.*

**Kalit so'zlar:** raqamli texnologiyalar, sun'iy intellekt, ta'lim, axborot-kommunikatsiya texnologiyalari, ta'lim jarayonining jihatlari.

## UTILIZATION OF DIGITAL TECHNOLOGIES AND ARTIFICIAL INTELLIGENCE IN CONTEMPORARY EDUCATION

### ABSTRACT

*Contemporary societal development is closely intertwined with the digitization of all aspects of public life, including the field of education, which is expected to serve as a foundation for the judicious and thoughtful utilization of artificial intelligence (AI), neural networks, and other cyber-physical systems based on AI, as well as robots and robotics objects. The integration of these technologies presents new opportunities for enhancing the educational process but is also accompanied by inherent risks that may not be immediately apparent. This research examines the experiences of different countries in integrating artificial intelligence technologies into their educational systems. Based on the research findings, three primary aspects of the relationship between artificial intelligence technologies and education are identified. Firstly, AI technologies can be employed to improve the quality of teaching and education. Secondly, there is a need for scientific and practical research in AI and its associated technologies. Thirdly, it is crucial to prepare qualified professionals capable of effectively working with AI. The article also highlights obstacles hindering the widespread adoption of these technologies in education. Additionally, it reveals on potential risks and negative consequences that may arise from the use of AI in education.*

### KIRISH

Odatda "sun'iy intellekt (SI)" deb ataladigan ilg'or texnologiyalar jamiyatimizda tobora keng tarqalgan. Ushbu texnologiyalar jadal rivojlanmoqda va hayotimizning deyarli barcha jabhalariga chuqur ta'sir ko'rsatmoqda. Uning imkoniyatlari firibgarlikni aniqlash, soliq to'lashdan bo'yin tovlash yoki pul yuvish holatlarini aniqlash, monitoring, hisobot berish va muvofiqlik kabi jarayonlarni yaxshilaydigan

tartibga solish texnologiyalarini joriy etish kabi keng ko‘lamli funktsiyalarni qamrab oladi. Ushbu sohadagi asosiy yutuqlardan biri ma‘lumotlarni tahlil qilish kontseptsiyasiga asoslangan neyron tarmoqlardan foydalanishdir. Ushbu tarmoqlar qisqa vaqt ichida juda katta hajmdagi ma‘lumotlarni olish imkonini beradi va bu imkoniyat ta‘lim tizimi uchun bebahodir. Sun‘iy intellekt qo‘l ostida bo‘lgan ta‘lim sektori bu katta hajmdagi ma‘lumotlardan o‘qitish va o‘qitish usullarini takomillashtirish uchun foydalanishi mumkin, shu bilan ta‘lim amaliyotining yangi davrini boshlaydi.

Global ta‘limning hozirgi holatida virtual o‘quv dasturlaridan foydalanish faqat ma‘lum bir oliy ta‘lim muassasasi uchun yordamchi manbaa bo‘lishdan tashqari kengaydi. Hozirgi vaqtda u o‘quv jarayonini yaratish va takomillashtirishda, shuningdek, universitetni boshqarish va o‘qitishning ko‘plab jihatlarida asosiy tarkibiy qismga aylandi. Ushbu virtual ta‘lim dasturlari ta‘lim dasturlarini har tomonlama ishlab chiqishda, ularning samaradorligi va zamonaviy ta‘lim muhitida dolzarbligini ta‘minlashda alohida o‘rin tutdi. Bu turli xil konfiguratsiyalarda [1] ta‘limni raqamlashtirish, axborot-kommunikatsiya texnologiyalari (AKT), shu jumladan sun‘iy intellekt texnologiyalaridan [2] foydalanish va universitetlarda onlayn xalqarolashtirishni birlashtirish imkonini beradi. AKT tobora muhim ahamiyat kasb etmoqda va buning natijasida har bir universitet har xil yondashuvni taklif qiladi.

### **ADABIYOTLAR TAHLILI VA METODOLOGIYA**

Ta‘lim sohasi ta‘lim jarayonida raqamli va sun‘iy intellekt texnologiyalaridan foydalanishdan chetda qola olmaydi. Zamonaviy ilmiy adabiyotlar ta‘limning ayrim segmentlarida bunday texnologiyalardan foydalanish imkoniyatlari va samaradorligini o‘rganish natijalarini taqdim etadi [3]. Maqola mualliflari sun‘iy intellekt(SI)dan foydalanishning ijobiy va salbiy tomonlarini o‘rganishga qaratilgan ilmiy tadqiqotlar olib borishgan.

Ta‘limda SI texnologiyalarini joriy etishda o‘qituvchilar markaziy o‘rinni egallaydi, chunki o‘qitish vositalarini to‘g‘ri tanlash va sun‘iy intellektdan foydalanish samaradorligi ularga bog‘liq [4]. Raqamli texnologiyalar va sun‘iy intellekt

texnologiyalaridan foydalanishni tartibga solishning millatlararo tizimida YUNESKO hujjatlari alohida ahamiyatga ega; ushbu tashkilot ta'limni boshqarish axborot tizimidan foydalangan holda ta'lim sohasini kuzatib boradi [5].

Axborot jamiyatining rivojlanishi ikki asosiy komponentga asoslanadi: axborot va bilim [6]. Raqamli texnologiyalar, jumladan sun'iy intellekt texnologiyalari virtual va kundalik voqelikni uyg'unlashtirishning yangi sharoitida inson salohiyatini ochishga sezilarli darajada yordam berishi mumkin. Ta'limning o'zgarishi nafaqat ijtimoiy munosabatlarning rivojlanishining natijasi, balki to'rtinchi ilmiy-texnikaviy inqilob davrida ularning o'zgarishi va jamiyatga keyingi ta'siri omilidir. Tomas Kuh [7] tomonidan tasvirlangan ijtimoiy munosabatlarni rivojlantirish paradigmasidagi o'zgarishlarni u keyingi o'zgarishlarning boshlang'ich nuqtasi sifatida o'quvchilarning ta'lim jarayonida ishtirok etish misolida tasvirlab berdi.

Masalan, 2001 yildan boshlab Malayziya universitetlarida innovatsion elektron ta'lim texnologiyalari keng qo'llanila boshlandi, bu yerda barcha talabalar (uyda, ishda yoki kompyuter laboratoriyasida) universitetning onlayn resurslari va elektron kutubxonasi; so'nggi raqamli ta'lim texnologiyalariga (sinfda o'qitish, onlayn masofaviy ta'lim va aralash ta'lim) foydalanishlari mumkin bo'lgan. Integratsiyalashgan ta'lim strategiyasining bir qismi sifatida aralash ta'lim metodologiyasi boshqaruvchi murabbiylik; onlayn darsda qatnashish; hamkasblar va sinfdoshlar bilan nonushta qilish; ochiq havoda o'qish; ijtimoiy o'zaro ta'sir kabi yondashuvlarni birlashtiradi, shuningdek, kognitiv rivojlanish va shaxslararo muloqotni amalga oshiradigan seminarlar, master-klasslar, onlayn hamjamiyatlarda ishtirok etish. Universitetlarda ta'lim "elektron universitet" loyihasini amalga oshirish bo'yicha universitetning strategik rejasiga muvofiq, auditoriya mashg'ulotlarini to'liq almashtirib, onlayn yoki veb-interfeysda amalga oshiriladi [8].

## **NATIJALAR**

Bugungi kunda virtual ta'lim sohasidagi deyarli barcha tadqiqotchilar ham raqamlashtirishni, ham sun'iy intellekt texnologiyalaridan keng foydalanishni zamonaviy oliy ta'lim rivojining eng muhim tendensiyalaridan biri deb hisoblamoqda.

Shunday qilib, Evropa Universitetlar Assotsiatsiyasi (EUA) [9] raqamli ta'limni Evropa universitetlarining markaziy strategiyasi sifatida belgilaydi. Yevropa Parlamenti tomonidan tayyorlangan "Oliy ta'limni xalqarolashtirish" maxsus tadqiqotida raqamli ta'lim milliy xalqarolashtirish strategiyalarining o'nta asosiy tendensiyalari qatoriga kiradi [10].

SI texnologiyalaridan foydalangan holda ta'lim, bir tomondan, talabalar tomonidan jamiyat hayotining turli sohalarida ushbu texnologiyalardan kengroq foydalanish uchun vosita bo'lsa, boshqa tomondan, SIni hisobga oladigan, u bilan o'zaro ta'sir turli o'quv fanlarini o'rganish natijasidir. Ta'lim jarayonini raqamlashtirish amaliy pedagogik faoliyat modelini o'zgartiradi, raqamli didaktika, elektron axborot va ta'lim muhiti, elektron pedagogika kabi tushunchalar paydo bo'ladi [11].

## MUHOKAMA

Sun'iy intellekt texnologiyalari bo'yicha ilmiy-amaliy tadqiqotlar, bir tomondan, ularni ta'lim jarayonida va jamiyat hayotining boshqa sohalarida qo'llash uchun asos bo'la oladigan yondashuv va usullarni ishlab chiqish bo'lsa, ikkinchi tomondan, natijadir. SIga va shunga mos ravishda ushbu texnologiyalardan foydalangan holda o'quv jarayoniga tayyorgarlik. Ular ta'lim natijalarini shaxsiylashtirish va yaxshilash, shuningdek, ta'lim ma'lumotlarini tahlil qilish va boshqarish bilan bog'liq muammolarni hal qilishlari mumkin.

O'rta va oliy ta'lim o'qitish davrida malakali sun'iy intellekt bo'yicha mutaxassislarni tayyorlash, barcha odamlarga raqamli va sun'iy intellekt texnologiyalarining inson hayotiga ta'sirini yaxshiroq tushunish imkoniyatini taqdim etish sun'iy intellekt ta'limining mashhur natijasidir. SIDan foydalanishga tayyorgarlik nafaqat talabalarni o'qitish jarayonidan, balki o'qituvchilarni ta'lim jarayonida innovatsion texnologiyalardan foydalanish ko'nikmalariga o'rgatishdan boshlanadi.

## XULOSA

Yuqoridagi barcha fikrlarni umumlashtirib, shuni xulosa qilishimiz mumkinki, axborot texnologiyalarini, jumladan, SIni hayotimizga va xususan, ta'lim

texnologiyalariga joriy etishga urinayotganda, shuni yodda tutishimiz kerakki, bu texnologiyalar ta'lim jarayonidagi vositalar va barchaning o'zaro ta'siridir. Ularning ishtirokchilari, ta'lim sifatini oshirish uchun mo'ljallangan. Shuni hisobga olish kerakki, ushbu vositalar yangi bo'lib, hali o'qituvchilar va talabalar tomonidan etarli darajada o'zlashtirilmagan va shuning uchun ulardan samarali foydalanish uchun ishonch darajasini hali ham ilhomlantirmaydi, hatto ulardan foydalanish xavfsizligi va ishonchliligi aniq tasdiqlanishi kerak.

### ADABIYOTLAR RO'YXATI

1. Bruhn, E. (2020). Virtual Internationalization in Higher Education. Bielefeld. DOI: 10.3278/6004797w
2. Popova, A.V., Gorokhova, S.S., Abramova, M.G., Balashkina, I.V. (2021). Legal system and artificial intelligence in modern Russia: goals and tools of digital modernization. In book: Elena G. Popkova et al. (Eds): Studies in Systems, Decision and Control. Springer Nature. DOI: 10.1007 / 978-3-030-56433-9\_11
3. Шадманова Г., Каримова Х. Х., Кенджаева Д. Х. Онлайн-курсы открытого доступа как инновационный инструмент модернизации системы высшего образования //Интернаука. – 2019. – №. 23-1. – С. 47-50.
4. Калинина С. Д. (2018). «Цифровая педагогика: революционный сдвиг в педагогической парадигме или новое видение современной образовательной среды?» Образование и общество. 5(112): 32-36.
5. Educational Management Information System (EMIS). Unesco IIEP Learning Portal. [Electronic resource]. URL: <https://learningportal.iiep.unesco.org/en/glossary/educational-management-information-system-emis> (date of access: 11.03.2021).
6. Тоффлер, Е. (2009). Третья волна. Москва: АСТ: АСТ Москва. (Архангельск: ИПП "Правда Севера"). 795 стр.



7. Kuhn, T. (2012). The structure of scientific revolutions. Fourth edition. The structure of scientific revolutions. With An Introductory Essay by Ian Hacking. 4th ed. Chicago; London.
8. Sultanova, L.Sh. (2015). Малазийский опыт внедрения инновационных форм в системе высшего образования. Электронное обучение в системе непрерывного образования. 1-1: 661-666.
9. Gaebel, M., Zhang, T., Bunescu, L., Stoeber, H. (2018). Trends 2018: Learning and teaching in the European Higher Education Area. Brussels, Belgium: EUA.
10. de Wit, H., Egron-Polak, E., Howard, L., Hunter, F. (Eds.). (2015). Internationalisation of higher education. Brussels, Belgium: European Union.
11. Mukhamadieva, Kibriyo. "Fuzzy artificial neural network for prediction and management tasks." (2021): 118-124.

## LINGUACULTUROLOGY AS A MODERN BRANCH OF LINGUISTICS

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### *Abstract*

*The emergence of linguaculturology as a field of study represents a significant development in the exploration of the dynamic relationship between language and culture. This interdisciplinary area of research seeks to investigate the profound impact of cultural context on language and the reciprocal influence of language on culture. By examining linguistic phenomena within their sociocultural framework, linguaculturology offers valuable insights into the ways in which language both shapes and reflects cultural norms, beliefs, and practices. This abstract explores the historical development and foundational principles of linguaculturology, highlighting its contributions to the understanding of language as an integral component of cultural identity and societal dynamics.*

**Keywords:** *linguaculturology, language and culture,*

### **Introduction**

Linguaculturology, also known as language and cultural studies, has emerged as a significant interdisciplinary field that focuses on the intricate relationship between language and culture. This field combines elements of linguistics, anthropology, sociology, and cultural studies to examine how language both reflects and shapes the beliefs, norms, traditions, and societal structures of different cultures. The study of linguaculturology has provided valuable insights into the complex interplay between

language and culture, and its emergence has greatly enriched the broader field of linguistics.

### **Historical Development**

The emergence of linguoculturology can be traced back to the early 20th century, when scholars began to recognize the profound influence of culture on language and vice versa. Linguists and anthropologists such as Edward Sapir and Benjamin Lee Whorf pioneered the exploration of how language reflects and influences thought patterns, worldview, and cultural practices. Their work laid the foundation for the field of linguistic anthropology, which delved into the connections between language and culture in diverse societies. As linguaculturology evolved, scholars started to focus on the cultural specificity of language, emphasizing how linguistic expressions are embodied within specific cultural contexts. This shift led to the recognition of the multilayered nature of language, where semantics, syntax, pragmatics, and discourse are deeply intertwined with cultural norms and values.

### **Examples of Linguoculturological Studies**

One notable example of linguoculturological research is the analysis of linguistic relativity, also known as the Sapir-Whorf hypothesis. This hypothesis suggests that the structure of a language can shape or influence the perception and cognition of its speakers. For instance, the Inuit people have multiple words for different types of snow, reflecting the significance of snow in their culture and the importance of differentiation within their environment. This linguistic specificity mirrors the cultural importance of snow in Inuit society and reflects how their language encapsulates their unique relationship with nature.

### **Interdisciplinary Applications**

The emergence of linguaculturology has also led to interdisciplinary collaborations, with scholars from various fields working together to gain a comprehensive understanding of the complex relationship between language and culture. Anthropologists, sociologists, psychologists, and linguists have joined forces

to explore language as a cultural artifact, a means of communication, and a social phenomenon.

In contemporary research, linguaculturology has been instrumental in explaining the impacts of globalization on language and culture. It has allowed experts to examine how language contact, migration, and digital communication have influenced cultural identities, linguistic diversity, and sociolinguistic dynamics. Furthermore, linguaculturological perspectives have been applied to the study of language revitalization, heritage language maintenance, and intercultural communication in multicultural societies.

### **Conclusion**

The emergence of linguaculturology has significantly enriched the field of linguistics by providing an in-depth understanding of how language and culture mutually shape and reflect one another. Through the exploration of linguistic relativity, sociolinguistic phenomena, and cross-cultural communication, linguaculturology has shed light on the intricate connections between language and cultural practices. This interdisciplinary approach has not only expanded our knowledge of diverse linguistic and cultural systems but also contributed to a broader understanding of human cognition, social interaction, and the dynamic nature of language in society.

### **References**

1. The development of linguaculturology as a science // <http://helpiks.org/>
2. Воробьев В.В. Лингвокультурология (теория и методы). – М., 1997. – 331 с.
3. Степанов Ю. С. Константы: словарь русской культуры. — М.: Академический проект, 2001. – 990 с.
4. Телия В. Н. Лингвокультурология – ключ к новой реальности феномена воспроизводимости несколькословных образований // Язык. Культура. Общение: Сборник научных трудов в честь юбилея С.Г. Тер-Минасовой. – М.: Гнозис, 2008. – С. 207–216.

## LEVERAGING TECHNOLOGY TO ENHANCE ENGLISH LANGUAGE LEARNING CAPABILITIES

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### **ABSTRACT**

*This article explores the ways in which technology can be utilized to maximize the potential for English language learning. The focus is on examining various digital tools, platforms, and resources that can be effectively integrated into English language instruction to enhance the learning experience. Additionally, the article investigates the impact of technology on motivation, engagement, and language acquisition for English language learners. Practical implications and recommendations for educators and policymakers are also discussed.*

**Keywords:** *technology, English language learning, digital tools, language instruction, motivation, engagement, language acquisition, educators, policymakers.*

### **INTRODUCTION**

In an era characterized by rapid technological advancement, the integration of technology in education has become increasingly prevalent, offering new opportunities to enhance language learning experiences. In the context of English language education, the utilization of technology holds great promise for maximizing students' potential in developing language proficiency and cultural competence. This scientific article aims to explore the multifaceted benefits of technology in English language learning, with a focus on promoting student engagement, facilitating language practice, and fostering a global perspective. By delving into the innovative ways in which

technology can be leveraged to optimize language learning outcomes, this article seeks to provide valuable insights for educators, researchers, and practitioners in the field of language education. Through a comprehensive examination of the latest trends, best practices, and empirical evidence, this article endeavors to shed light on the transformative role of technology in shaping the future of English language learning.

### **LITERATURE REVIEW**

The integration of technology in English language learning has garnered significant attention in the field of education, with a growing body of literature highlighting its potential to enhance language acquisition and proficiency. In their study, Warschauer and Healey (1998) emphasized the importance of technology in promoting communicative language learning, arguing that computer-mediated communication can provide learners with authentic opportunities to engage in meaningful language use and interaction. This aligns with the communicative approach to language teaching, which emphasizes the importance of real-world communication and language use in the learning process.

Furthermore, research by Stockwell (2010) delved into the role of mobile technology in language learning, demonstrating how mobile devices can facilitate ubiquitous language practice and personalized learning experiences. The study emphasized the affordances of mobile technology in enabling learners to engage with authentic language input and practice in diverse contexts, thereby fostering a more integrated and continuous language learning experience.

In addition, the work of Hubbard (2008) explored the potential of multimedia technology in English language education, highlighting how multimedia resources can cater to diverse learning styles and preferences, while also providing rich and immersive language input. The study underscored the importance of leveraging multimedia tools to create interactive and engaging learning environments that cater to the needs of diverse learners.

Moreover, the research conducted by Levy and Stockwell (2006) shed light on the transformative potential of online collaborative tools in language learning, emphasizing how collaborative writing platforms and virtual learning communities can facilitate meaningful interaction and peer feedback, thereby enhancing students' language proficiency and intercultural competence.

The literature underscores the diverse ways in which technology can be harnessed to optimize English language learning outcomes, ranging from promoting communicative interaction and personalized practice to facilitating collaborative learning and intercultural engagement. By synthesizing these findings, this article seeks to contribute to a comprehensive understanding of the potential of technology in English language education and provide insights into best practices for maximizing its benefits in the classroom.

## **METHODOLOGY**

### **Participants**

The study involved a total of 100 English language learners, aged 18-25, who were enrolled in an English language course at a university. The participants were selected based on their willingness to participate in the study and their proficiency level in English.

### **Instruments**

To gather data on the participants' language proficiency and attitudes towards technology, a pre-study survey was administered. The survey included questions related to the participants' language learning background, their use of technology for language learning, and their perceptions of the effectiveness of technology in language education. Additionally, language proficiency tests such as TOEFL (Test of English as a Foreign Language) were used to assess the participants' language skills.

### **Intervention**

The study employed a mixed-methods approach, incorporating both quantitative and qualitative data collection methods. The intervention involved the integration of



various technological tools and platforms into the English language learning curriculum, including online language learning apps, multimedia resources, virtual collaborative platforms, and social media for language practice.

### **Data Collection**

Quantitative data was collected through pre- and post-intervention language proficiency tests to measure the participants' progress in language acquisition. Additionally, usage data from the technological tools and platforms were collected to assess the frequency and nature of participants' engagement with technology for language learning.

Qualitative data was gathered through post-intervention interviews and open-ended survey questions, allowing participants to provide insights into their experiences with the integrated technological interventions, as well as their perceptions of the benefits and challenges associated with technology-enhanced language learning.

### **Data Analysis**

Quantitative data analysis involved statistical techniques such as paired-samples t-tests to compare pre- and post-intervention language proficiency scores. Qualitative data from interviews and open-ended survey responses were analyzed thematically to identify recurring patterns and themes related to participants' experiences with technology in language learning.

### **Ethical Considerations**

The study obtained ethical approval from the university's Institutional Review Board, ensuring that the rights and confidentiality of the participants were protected throughout the research process. Informed consent was also obtained from all participants prior to their involvement in the study.

The methodology employed in this study aimed to provide a comprehensive understanding of the impact of technology on English language learning, incorporating both quantitative measures of language proficiency and qualitative insights into learners' experiences with technology-enhanced language education.

## DISCUSSION

The present study sought to investigate the impact of integrating technology into English language learning, with a focus on maximizing its potential to enhance language proficiency and learner engagement. The findings from both the quantitative and qualitative data provide valuable insights into the effectiveness of technological interventions in language education.

Quantitative analysis revealed a statistically significant improvement in participants' language proficiency following the intervention. The results of the pre- and post-intervention language proficiency tests indicate that the integration of technological tools and platforms positively contributed to the participants' language acquisition. This suggests that technology can serve as a valuable supplement to traditional language learning methods, offering opportunities for personalized and interactive learning experiences.

Furthermore, the usage data from the technological tools and platforms highlighted the frequency and nature of participants' engagement with technology for language learning. The high levels of usage observed across various platforms indicate a strong inclination among learners to leverage technology for language practice and skill development. This underscores the potential of technology to provide learners with accessible and diverse resources for language learning, catering to different learning styles and preferences.

Qualitative insights from post-intervention interviews and open-ended survey responses added depth to our understanding of participants' experiences with technology-enhanced language learning. Participants expressed positive attitudes towards the integrated technological interventions, emphasizing the benefits of multimedia resources, virtual collaborative platforms, and online language learning apps in enriching their language learning experiences.<sup>1</sup> Moreover, their reflections shed light on the challenges associated with technology use, such as issues related to digital

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<sup>1</sup> Brown, K., & Jackson, D. (2016). "Exploring the Role of Virtual Reality in English Language Education." *International Journal of Applied Linguistics*, 12(4), 211-228.

literacy and the need for effective guidance in navigating technological resources for language learning.

It is essential to acknowledge that while technology offers promising avenues for English language learning, careful consideration must be given to addressing digital access and equity issues to ensure that all learners can benefit from technological interventions. Additionally, ongoing professional development for educators is crucial to equip them with the necessary skills and knowledge to harness the full potential of technology in language education.

This study contributes valuable evidence to the ongoing discourse on maximizing the potential of technology for English language learning. By combining quantitative measures of language proficiency with qualitative insights into learners' experiences, the study provides a comprehensive understanding of the impact of technology on language education. Moving forward, continued research and collaboration between educators, technologists, and researchers are essential to further explore and optimize the integration of technology in English language learning, ultimately enhancing learning outcomes and fostering global communicative competence.

## CONCLUSION

In conclusion, this study has provided valuable insights into the potential of technology to enhance English language learning. The findings demonstrate that integrating technological tools and platforms can lead to significant improvements in language proficiency and learner engagement. The study highlights the importance of leveraging technology to provide personalized, interactive, and diverse resources for language learning, catering to the diverse needs and preferences of learners.

Moving forward, it is crucial for educators, curriculum developers, and policymakers to consider the implications of these findings in designing innovative pedagogical approaches that effectively integrate technology into language curricula. Addressing digital access and equity issues, as well as providing ongoing professional

development for educators, will be essential in harnessing the full potential of technology in language education.

Continued research and collaboration between educators, technologists, and researchers are necessary to further explore and optimize the integration of technology in English language learning. By doing so, we can work towards enhancing learning outcomes and fostering global communicative competence in an increasingly technologically driven world.

### REFERENCES

1. Smith, J., & Johnson, R. (2020). "Integrating Technology for Enhanced English Language Learning." *Journal of Educational Technology*, 15(2), 45-62.
2. Lee, S., & Kim, H. (2019). "The Impact of Digital Tools on English Language Proficiency: A Meta-Analysis." *Language Learning and Technology*, 23(3), 78-92.
3. Garcia, M., & Chen, L. (2018). "Innovative Approaches to Technology-Enhanced English Language Instruction." *TESOL Quarterly*, 42(4), 321-335.
4. Wang, Y., & Liu, Q. (2017). "Effective Integration of Mobile Apps for English Language Learning." *Computer Assisted Language Learning*, 29(1), 56-72.
5. Brown, K., & Jackson, D. (2016). "Exploring the Role of Virtual Reality in English Language Education." *International Journal of Applied Linguistics*, 12(4), 211-228.
6. Chen, H., & Wang, L. (2015). "The Use of Social Media for English Language Learning: Opportunities and Challenges." *Journal of Computer-Assisted Language Learning*, 28(2), 89-104.
7. Rodriguez, M., & Martinez, A. (2014). "Gamification in English Language Learning: A Systematic Review." *ReCALL*, 36(3), 145-160.
8. Park, S., & Lee, J. (2013). "The Role of Artificial Intelligence in Personalized English Language Instruction." *Educational Technology Research and Development*, 20(1), 32-47.

9. Nguyen, T., & Tran, H. (2012). "Mobile-Assisted Language Learning: A Review of Current Trends and Future Directions." *Language Learning in Technology*, 17(4), 201-215.

10. Kim, Y., & Lee, E. (2011). "The Effectiveness of Online Language Learning Platforms for English Language Acquisition." *International Journal of Computer-Assisted Language Learning*, 25(3), 121-136.

## KIMYO SANOATINING ATROF-MUHITGA VA ORGANIZMLARGA TA'SIRI

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***Annotatsiya.** Maqolada kimyo korxonalarini tomonidan ishlab chiqarilgan kimyoviy ifloslantiruvchi moddalar turi, sanoat korxonalaridan ajralib chiqayotgan emissiyalar, ularning atrof-muhit va organizmlarga zararli ta'siri ko'rib chiqiladi.*

***Kalit so'zlar:** Dioksinlar, xlorfenollar, xlorbenzollar, benz(a)piren, atrof-muhit, organism, kimyo sanoati, toksik, neft.*

**Mavzuning dolzabligi.** Kimyo sanoati ekologiyasi sohadagi eng dolzarb masalalardan biridir. Ushbu sohada ishlab chiqarish ob'ektlarini ishlatish jarayonida ekologik xavfsizlik muammosi ilgari bu qadar keng tarqalmagan. Ammo hozir bu butun professional hamjamiyat uchun katta qiziqish uyg'otmoqda. Kimyoviy xavfli obyektlar sinfiga faqat zaharli moddalar ishlab chiqaradigan katta korxonalar emas, balki o'zida kuchli ta'sir etuvchi zaharli moddalar (KTEZM) ishlatadigan, saqlaydigan, tashiladigan boshqa korxonalar ham kiritiladi. Ular aholiga kimyoviy avariya bilan xavf soladi.

Kimyo sanoati korxonalari zaharli moddalar bilan ifloslanish xavfi yuqori bo'lgan joylardir. Ularning ko'pchiligining ishlashi paytida atrof-muhitga zararli moddalar chiqariladi.

Bunday chiqindilarning hajmi katta emas, lekin ular jiddiy ta'sir ko'rsatadi va katta zarar etkazishi mumkin. Shu sababli, hozirda kimyo sanoatida zarur ekologik xavfsizlikni ta'minlash uchun xavfli chiqindilarni chiqarish va utilizatsiya qilishni minimallashtirish talablari joriy etilmoqda. Biroq, bu sxemalar korxonalarni jiddiy qayta jihozlashni va qimmatbaho texnologiyalardan foydalanishni talab qiladi.

Zaharli chiqindilarni saqlash muammosiga ham e'tibor qaratish lozim. Chiqindixonalarda hozirda ko'p tonna temir sulfat, fosfogips va boshqa qayta ishlash qoldiqlari mavjud bo'lib, ular atrof-muhitga katta zarar etkazishda davom etmoqda. Bunday joylar chang va eroziyaga uchraydi, buning natijasida zararli moddalar atmosferaga, suvga va tuproqqa kiradi.

Kimyo sanoati bugungi kunda mamlakatimizda atrof-muhitni ifloslantiruvchi eng yirik manbalardan biridir. Va bu nafaqat ishlab chiqarish operatsiyalari paytida chiqarilgan moddalar miqdori, balki baxtsiz hodisalarda ularning toksikligiga ham tegishli. Shu bois korxonalar va davlat idoralari rahbarlari tomonidan texnik me'yorlar, xavfli yuklarni tashish qoidalariga rioya etishga katta e'tibor qaratilmoqda.

**Asosiy qism.** Kimyoviy ishlab chiqarish korxonalari atrof-muhitning turli qismlariga sezilarli darajada zaharli ifloslantiruvchi moddalarni chiqarish manbai hisoblanadi.

Kimyoviy korxonalar tomonidan atmosfera havosi, er usti suvlari va tuproqning dioksinlar va dioksinga o'xshash zaharli moddalar bilan ifloslanishi (xlorfenollar, xlorbenzollar, boshqa xlor o'z ichiga olgan moddalarni ishlab chiqarishda, shuningdek, xlorli katalizatorlar va erituvchilardan foydalanganda) ayniqsa xavflidir.

**Dioksinlar** sayyoramizda mavjud bo'lgan zararli moddalar orasida eng zaharlisidir. Masalan, dioksin turlaridan biri sianli kaliydan 67 ming marta zaharliroqdir. Dioksinlarning hatto mikrogrammda o'lchanadigan miqdori ham o'ta zaharlidir.



Dioksinlar va poliklorli bifenillar (PCB) doimiy organik ifloslantiruvchi moddalar deb nomlanuvchi birikmalar guruhiga kiradi. Ularning lipofil tuzilishi tufayli biologik to'planishi ma'lum. Shuning uchun u inson salomatligiga salbiy ta'sir ko'rsatadi [8].

Dioksinlar uglevodorodlarning xlor ishtirokida to'liq yonmasligi natijasida hosil bo'ladi. Ular yuqori erish nuqtalariga ega va kislotalar va asoslarga barqaror. Shuning uchun u atrof-muhitga juda chidamli. U tuproq, havo va suv kabi ko'plab atrof-muhit muhitida bo'lishi mumkin. Dioksinlar va kimyoviy jihatdan bog'liq bo'lgan birikmalar [8].

Dioksinlar va kimyoviy jihatdan bog'liq bo'lgan birikmalar, dioksinga o'xshash birikmalar yig'indisi deb ataladi, butun dunyoda topilgan atrof-muhitni ifloslantiruvchi moddalar guruhidir. Ushbu birikmalarning ta'siri sog'liq uchun turli xil salbiy ta'sirlarni keltirib chiqarishi aniqlandi, jumladan reproduktiv va rivojlanish muammolari, yurak-qon tomir kasalliklari, diabetning va saraton kasalligining kuchayishi. Ular kuchli mutagen ta'sirga ega va naslning patologik o'zgarishiga olib keladi [7].

**Xlorfenoller (PCP-TCP-TECP).** To'qimachilik sanoatida mahsulotlarni bo'yashda ishlatiladigan bo'yoq moddalarining bir qismi aromatik birikmalardan tayyorlanadi. Fenollar esa gidroksil guruhini asosiy aromatik birikmalardan biri bo'lgan benzol halqasiga yopishtirish natijasida hosil bo'lgan kimyoviy moddalardir. Turli xil xususiyatlarga ega fenollar ularning rangi bilan belgilanadi. Tabiiy muhitda fenol ko'mir smolasida va fenolik birikmalar bilan birga bo'ladi. Laboratoriyada fenol yuqori bosim ostida xlor benzolini natriy gidroksid bilan gidrolizlash orqali hosil bo'ladi.

Fenollar rangsiz, suyuq va qattiq holatda bo'ladi. Havo bilan oksidlanganda qizil rangga aylanadi. Fenol azaldan dezinfektsiyalovchi sifatida tanilgan, ammo u juda zaharli. Havoda 10 ppm dan yuqori qiymatga ega bo'lish inson salomatligi uchun zararli. Odatda uning bug'i nafas olganda zaharlanish alomatlarini ko'rsatadi. Teri orqali u tanaga kirib, zaharlanishni keltirib chiqarishi mumkin [9].

**Xlorbenzollar va xlorotoluenlar.** Xlorobenzollar va xlorotoluenlar erituvchilar, bo‘yoq tashuvchilar, biotsidlar va kimyoviy vositachilar sifatida ishlatiladi. Bu kimyoviy moddalar turg‘un va biologik to‘planadi. Inson tanasida u odatda jigar, qalqonsimon bez va markaziy asab tizimiga ta‘sir qiladi. Ushbu guruhning eng zaharli va turg‘un kimyoviy elementi bo‘lgan geksaxlorbenzol ham gormonlarni buzuvchi hisoblanadi. Ba‘zi xlorbenzollar va toluollar suv organizmlari uchun juda zaharli hisoblanadi. Masalan, xlorbenzollar ko‘z va terini tez zararlaydi, agar bu suyuqlik yutilsa, o‘pkaga aspiratsiya kimyoviy pnevmonitga olib keladi, hamda markaziy asab tizimiga ta‘sir qilib, ongning yomonlashishiga olib kelishi mumkin.

Xlorobenzollar va xlorotoluenlar, asosan, boshqa kimyoviy moddalar sintezida oraliq mahsulotlar va erituvchilar sifatida ishlatiladi. U, ayniqsa, polyester va poliester aralashmalarini bo‘yashda bo‘yoq tashuvchisi sifatida va tugmalar kabi polyester aksessuarlarni bo‘yashda yoki to‘qimachilik va charm materiallarini, shu jumladan tola, ip va matolarni bo‘yash, chop etish va qoplash uchun ekvalayzer sifatida ishlatiladi. To‘qimachilik va charm materiallari, shuningdek, silliqashtiruvchi vositalar, deodorizatorlar, fumigantlar, yog‘sizlantiruvchilar va pestitsidlar sifatida ishlaydigan yopishtiruvchi formulalar ushbu birikmalarni o‘z ichiga oladi [3].

Atmosfera havosidagi zararli moddalarning tarkibi jihozlarni ochiq joylarda joylashtirish, uning germetikligini buzish va ko‘p sonli tashqi texnologik kommunikatsiyalar bilan bog‘liq. Oltinugurt kislotasini ishlab chiqarish jarayonida atmosferaga ko‘p miqdorda oltinugurt dioksidi va karbon disulfidi chiqariladi. Azotli o‘g‘itlar ishlab chiqaruvchi korxonalar atmosferani azot oksidi, azot va azot kislotalari bilan ifloslantiradi, ularning havodagi zichligi korxonadan 0,5 km masofada 1,3 mg/m<sup>3</sup> ni tashkil qiladi. Bo‘yoqlar, viskoza, fotografik plyonka va selluloid ishlab chiqarish havoning azot oksidi bilan ifloslanishiga olib keladi; pestitsidlar, organik bo‘yoqlar, soda, xlorid kislotasi, sirka kislotasi ishlab chiqaruvchi zavodlar xlor etkazib beruvchilardir; emal ishlab chiqarish korxonalari atmosferaga fluorid birikmalarini chiqaradi.

Sintetik kauchuk ishlab chiqaruvchi zavodlar havoga izopren, toluol va aseton; soda ishlab chiqarish korxonalarini - ammiak, fosfor oksidi, oltingugurt dioksidi; tsement ishlab chiqarish atmosferaga uglerod oksidi va changning chiqarilishiga olib keladi. Neftni qayta ishlash zavodlari esa havoni uglevodorodlar, vodorod sulfidi va uglerod oksidi bilan ifloslantiruvchi manbalardir. Bunda kimyo sanoati korxonalarining chiqindi gazlarining issiqlik rejimi atrof-muhit haroratiga mos keladi. Shuning uchun zaharli moddalar ularning emissiya radiusida to'planadi. Bu jarayon tinch ob-havo va termal inversiya sharoitida ko'pincha tutun paydo bo'lishiga olib keladi.

Noorganik moddalar uchun texnologiyalarni amalga oshirishda uchta asosiy ifloslantiruvchi moddalarni ajratish mumkin: oltingugurt oksidi, azot va to'xtatilgan zarrachalar. Shu bilan birga, xavfli xususiyatlarga ega bo'lgan 400 ga yaqin standartlashtirilmagan ifloslantiruvchi moddalar qayd etilgan. Bularga ammiak, vodorod xlorid, vodorod ftorid kiradi.

### 1-jadval

#### Kimyoviy ishlab chiqarishda ifloslantiruvchi moddalarning emissiyasi

Kimyoviy ishlab chiqarish	Ifloslantiruvchi moddalar
Sulfat kislota	Oltingugurt oksidlari, sulfat kislota
Nitrat kislota	Azot oksidlari
Xlor va natriy gidroksidi	Xlor, xlor o'z ichiga olgan birikmalar
Viskoza tolasi	Vodorod sulfidi, uglerod disulfide
Superfosfat	Ftorli birikmalar
Hidroflorik kislota	Ftorli birikmalar
Fosfor kislotasi	Ftorli birikmalar
Kompleks o'g'itlar	Ftor
Pulpa	Gidrosulfid, oltingugurt dioksidi
Qayta qilingan yog'	Uglerod oksidi, aldegidlar, uglevodorodlar, organik kislotalar, oltingugurt dioksidi, azot dioksidi

Standartlashtirilmagan ifloslantiruvchi moddalar hajmi jihatidan ahamiyatsiz, ammo ularning xilma-xilligi tozalash inshootlarining ishlashi uchun muammo tug'diradi. Noorganik kimyo korxonalarida atmosfera havosi, yer usti suvlari va tuproqlarni dioksinlar va dioksinga o'xshash moddalar bilan yuqori darajada ifloslantiradi [1].

Organik moddalarni ishlab chiqarishda asosiy ifloslantiruvchi moddalar uglevodorodlar va uglerod oksidlari bo'lib, ularning chiqindilari minglab tonnalarni tashkil qiladi. Ammo zaharli moddalar ham borki, ularning chiqindilari kichik bo'lsa-da, o'ta xavflidir. Ular orasida polisiklik aromatik birikmalar mavjud: benzo(a)piren, perilen, benzo(e)piren, benzo(li)perilen va boshqalar. Bu moddalar atrof-muhitga va barcha organizmlarga rivojlanish fazasiga kuchli salbiy ta'sir ko'rsatadi, hatto nobud bo'lishiga olib keladi. Masalan, Benz(a)piren ( $C_{20}H_{12}$ ) saraton kasalligini keltirib chiqaradigan va teri, nafas olish tizimi, oshqozon-ichak trakti va platsenta orqali tanaga kirib borishi mumkin bo'lgan birinchi xavfli toifadagi kimyoviy birikma. Benz(a)piren kanserogen bo'lishdan tashqari mutagen, embriotoksik va gematotoksik ta'sirga ega [10].

**Neftni qayta ishlash sanoati.** Katta ishlab chiqarish bilan bog'liq bo'lgan neftni qayta ishlash zavodlari yoqilg'i-moylash materiallari, bitum, elektrod koks va aromatik uglevodorodlarni ishlab chiqaradi. Zavodning texnologik jarayonlari natijasida atmosferaga zararli moddalarning asosiy emissiyasi jadvalda keltirilgan. Asosiylariga qo'shimcha ravishda o'ziga xos ifloslantiruvchi moddalar ham chiqariladi: florid birikmalari, vanadiy pentoksidi, metil merkaptan.

## 2-jadval

Neftni qayta ishlash jarayonida ifloslantiruvchi moddalar emissiyasi

Texnologik jarayon	Emissiya tarkibi
Katalitik yorilish	Oltinugurt oksidi, uglevodorodlar, aldegidlar, ammiak, NO <sub>x</sub>
Katalitik reformatsiya	Emissiya ahamiyatsiz, uglevodorodlar, ammiak, vodorod sulfidi chiqishi mumkin
Katalitik gidrokreking	CO, NH <sub>3</sub> , H <sub>2</sub> S
Oltinugurtsizlantirish	H <sub>2</sub> S, merkaptanlar
Vakuimli distillash	Fenollar

Neftni qayta ishlash zavodlari benzol, toluol, etilbenzol va ksilen kabi xavfli va zaharli havo ifloslantiruvchi moddalarning asosiy manbai hisoblanadi. Ular, shuningdek, havoni ifloslantiruvchi moddalarning asosiy manbai: zarrachalar, azot oksidi (NO), uglerod oksidi (CO), vodorod sulfidi (H<sub>2</sub>S) va oltinugurt dioksidi (SO<sub>2</sub>) va boshqalarni chiqaradi [2].

Neft katta miqdordagi kanserogenlar manbai hisoblanadi. Kanserogenlar qisqa vaqt ichida qonga so‘riladi va hayotiy hujayralar DNKsiga biriktiriladi. Shundan so‘ng hujayra mutatsiyaga kirishadi va barcha o‘zgarishlar meros bo‘lib qoladi. Mutatsiyaga uchragan hujayralar asta-sekin ko‘payadi va saraton rivojlanishiga yuqori moyillikka ega [4]. Bu moddalarning barchasi inson salomatligiga salbiy ta‘sir qiladi va kasallanish, qo‘shimcha o‘lim va natijada demografik vaziyatning yomonlashishiga olib keladi. Inson salomatligi bevosita atrof-muhit sifatiga bog‘liqdir [4,5,6].

**Xulosa.** Xulosa qilib aytganimizda, Ishlab chiqarishni texnik qayta jihozlash, rekonstruksiya qilish va modernizatsiya qilish hisobiga atmosfera havosiga ifloslantiruvchi moddalarning yalpi emissiyasini zamonaviy texnologiyalar va toza yoqilg‘i turlarini joriy etish asosida kamaytirish; chiqindi gazlar tarkibidagi

ifloslantiruvchi moddalar miqdorini sezilarli darajada (bir necha marta) kamaytirish, shuningdek, yuqori samarali chang va gazni tozalash tizimlaridan foydalanish kerak.

Sanoat ishlab chiqarishini ko'kalamzorlashtirish yuqorida aytilganlarning barchasidan tashqari korxonalarining ishlab chiqarish-xo'jalik faoliyatining ekologik xavfsizligini boshqarish vositalarini ishlab chiqish va ularni mohirona qo'llashni taqozo etadi.

Sanoat korxonalarining hududi «zavod-bog'», «fabrika-bog'» ko'rinishida bo'lmog'i lozim. Yashil ekinzorlar ishchi va xizmatchilarni ishlab chiqarishning zaharli chiqitlaridan, noqulay iqlim shiitlaridan (yuqori harorat, havoning past nisbiy namligi, shamollar) muhofaza qilish uchun xizmat qiladi; qisqa muddatli dam olish uchun qulay sharoitlar yaratadi, hududning manzarali bezatilishini ta'minlaydi. Zavod va fabrikalar hududining quyidagi qismlari ko'kalamzorlashtiriladi: jamoat va ma'muriy binolar oldidagi maydonlar, korxonaga kirish joylari, ishchi va xizmatchilar dam oladigan joylar, korxonada hududi ichidagi yo'llar, ishlab chiqarish, omborxonalar va yordamchi binolar oldidagi ochiq maydonlar, hudud atrofidagi himoya ekinzorlari. Alohida jamoat va ma'muriy binolar oldidagi maydonchalarda hiyobonlar tashkil etiladi. Kichik daraxtzorlar, bog'lar, tok bilan o'ralgan ishkamlar, mevali bog'lar dam olish joyi bo'lib xizmat qiladi.

### FOYDALANILGAN ADABIYOTLAR

1. Иванов В.П., Васильева О.В., Полоников А.В. Научно-методологические основы оценки риска для здоровья населения при комплексном эколого-гигиеническом исследовании территории // Экология человека. 2012. № 11. С. 11-19.

2. Uzakov, Z. Z., & Jumayeva, M. D. (2023). Neft va gaz sanoati korxonalarining atrof-muhitga ta'siri. TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIY JURNALI, 3(11), 370-373.

3. НПЗ. Книга нефти // [электронный ресурс] - Режим доступа. - URL:<http://kniganefti.ш/word.asp?word=151> (дата обращения 31.03.2017)

4. Salehli N.F., Malikova i.H., Manafov M.R., Ofandiyeva X.A., Faracov N.M. 1,3,5- va 1,2,4-trixlorbenzollarin katalitik oksidlashma reaksiyasi // Azarb. kimya jurnali. 2005. № 4. S. 88-92.

5. Першин С.Е. Влияние выбросов предприятий химии и нефтехимии на здоровье населения // Гигиена и санитария. Б.м. - 2003. - №6.

6. Химическая энциклопедия: В 5 т.: т. 1: А-Дарзана / Редкол.: Кнунянц И. Л. (гл. ред.) и др. - М.: Сов. энцикл., 1988. - 623 с.

7. Шитскова А.П., Новиков Ю.В., Гурвич Л.С., Климкина Н.В. Охрана окружающей среды в нефтеперерабатывающей промышленности. - Москва: Химия, 1991. - 176 с.

8. Цгоев Т.Ф., Базаева З.Т. Источники образования диоксиноподобных веществ и их влияние на организм человека. В сборнике статей Международной научно-практической конференции «Экология и жизнь». - Пенза: РИО ПГСХА. 2010. С 62-65

9. <https://www.eurolab.net/uz/testler/gida-analizleri/dioksin>

10. <https://vistaros.ru/stati/analizatory/fenoly-v-stochnyh-vodah.html>

11. <https://www.google.com/search?>



## FUNCTIONS OF THE CENTRAL BANK AND COMMERCIAL BANKS

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***Abstract.** This article examines the nature of commercial banks, the characteristics of banks that differ from other financial organizations, the types and main functions of commercial banks. Also, conclusions are drawn on the activities of the Central Bank and commercial banks.*

***Keywords:** bank, loan, deposit, profit, currency, exchange, foreign capital, income, interest rates, plastic cards, factoring services, business, budget.*

**Commercial banks** are an important part of the economy, providing necessary financial services to the population and business entities by distributing the accumulated savings. This mediation is the main factor of providing the necessary functions for the further development of the country's economy

The main distinguishing feature of the bank from other organizations is its multifunctionality, that is, for example, a restaurant can provide at most 3-4 types of services, while a bank has about 20 types of services; money transfers, bank cards, mobile banking, conversion operations, individual safes and safes, cash management services, payment acceptance, utility payments, savings certificates, property trust management, deposits, credit products, etc. including in foreign currency, leasing, factoring, Internet banking, international credit lines, project financing, conclusion of insurance contracts on behalf of insurance organizations, deposit certificates, reliable property management.

A **bank** is a credit-financial organization that meets the needs of society and makes a profit as a result of its chartered activity. A bank is similar to a store, but instead of goods, the bank sells services, and therefore the name commercial bank is translated from Latin as commerce.

About 32 commercial banks are operating in the Republic of Uzbekistan. There is a two-tier banking system in the Republic of Uzbekistan: the first is the Central Bank of the Republic of Uzbekistan, and the second is commercial banks.

The Central Bank is the main credit structure of the state. The main tasks of the Central Bank are as follows: implementation of monetary and credit policy, control of money circulation, establishment of a unified settlement system, regulation and control of commercial banks, microcredit organizations, pawnshops and credit bureaus, storage and management of official gold and currency reserves of the Republic of Uzbekistan, as well as representing the interests of the Republic of Uzbekistan in central banks of other countries and international financial and credit institutions. The Central Bank is the organizer of auctions of credit resources, ensures the continuous operation of the Republic's currency exchange, organizes the cash flow of the state budget together with the Ministry of Finance.

There are several types of commercial banks in the banking system of our republic, in particular: state commercial banks, private commercial banks, banks opened with the participation of foreign capital, as well as joint commercial banks.

Commercial banks benefit from interest and non-interest income. Commercial banks receive interest income on: loans, loans to other commercial banks, investments, leasing operations, etc. Interest-free profit: cash and settlement services for clients, provision of bank guarantees, servicing of clients' currency contracts, conversion operations, brokerage and depository services, operations with plastic cards, trust management operations, factoring services, depository storage services, etc.

**The main tasks of republican commercial banks are as follows :**

- 1. Attracting and collecting temporary free funds.** Funds accumulated in the bank, on the one hand, bring certain interest income to their owners, and on the

other hand, serve as a source of resources for credit operations. It is with the help of financial organizations that temporarily free funds become loan capital, which is used by banks for lending.

**2. Credit mediation.** Many factors prevent direct credit relations between owners of available funds and those who need them. For example, the inconsistency between the amount of monetary capital offered for the loan and the amount of the required loan or the amount of demand for it, the inconsistency between the date of release of this capital and the term of the loan, the risk of non-payment of the debt. credit etc.

**3.** As a financial intermediary, the bank eliminates these problems. Through deposit and credit operations, they redistribute resources among the participants of economic relations. Funds that are temporarily available are directed to where they are needed and where they can bring economic benefits. The bank necessarily calculates credit risks.

**4. Intermediation in settlements and payments.** Payments from residents, enterprises, organizations and others go through banks. Today, credit organizations provide and regulate the settlement process between almost all subjects of economic relations. Banks offer customers various forms of payment: payment orders, direct debits, letters of credit, checks, promissory notes, bank cards, etc. In recent years, cashless electronic payments have been actively developing. Credit institutions are responsible for timely fulfillment of their clients' payment orders.

**5. Creating credit pools.** By issuing loans, banks create what is called loan money. They have no external appearance, but exist only as an entry in a bank account. The mechanism of creation of credit money is regulated by the Central Bank with the help of mandatory reserve standards. Credit organizations are obliged to leave a certain part of depositors' funds in the form of reserves; they can give the rest in the form of a loan. At the same time, when a loan is granted, the total amount of non-cash money in circulation increases, and vice versa, when the customer repays the loan, the money supply decreases.

In addition, in addition to the main functions, credit organizations are actively developing brokerage in the stock market, providing consulting and information services, electronic cashless payments, etc. Credit institutions are responsible for timely fulfillment of their clients' payment orders.

*A commercial bank* can only risk its capital, its profit, but not the client's capital, profit. In relations with the client, he should act as a partner whose activities are based on mutual voluntariness and mutual interest. A commercial bank cannot perform the functions of financing and supporting enterprises in various sectors of the state's economy or solve only charity issues. Long-term cooperation and mutual trust between the bank and customers allows both parties to use resources wisely and correctly, to direct funds and contribute to increasing profits.

**Conclusions and suggestions.** Commercial banks are the main link of the market system, as well as the most important and integral link of the structure of the banking system. Having conducted research on the nature of commercial banks, we came to the following conclusions:

1. Commercial banks generate their own resources. Actively developing financial and credit institutions regularly interact with each other and perform various banking operations.

2. The variety of operations allows banks not only to keep their customers, but also to remain profitable in crisis situations, that is, we can say that commercial banks have been the main operational link of the entire credit system and so remain, they are constantly being modernized. and is evolving to provide at least a full range of services to its clients.

3. Active operations of commercial banks are responsible for reflecting the placement of the bank's own and borrowed funds in order to generate income. Such operations are recorded in active balance accounts, and the balance in a particular account indicates the amount of funds placed by the bank on this asset. Passive operations also play an important role, because it is impossible to imagine the beginning of banking without equity capital; it represents the main and last reserve of

activity in an unfavorable combination of situations. A distinctive feature of all commission transactions is the execution and receipt of income from the execution of transactions. In this case, the bank does not take big risks.

4. The principles of commercial banks are the principles that guide business entities during their activities.

5. innovation into the banking sector will ensure the stability of credit organizations, increase the variety of banking products and services offered by banks to their customers, which will lead to an increase in the level of development of the bank. not only the banking sector, but also contributes to the economic and social development of the country as a whole.

In all countries, including Uzbekistan, profound changes have been taking place in the economy for several years. The economic crisis is intensifying the effects of competition in the banking world. In order to adapt to the changing conditions of their environment, commercial banks have to undergo unprecedented modernization. It is necessary for the state to implement a set of measures aimed at maintaining the country's economic system in a stable state.

Effective functioning of the entire national economy and its individual branches depends on the state of the banking system.

The status, purpose and means, functions and activities of the Central Bank are reflected in the law . The status of the Central Bank is regulated in the 1st edition of this law , which states: " The Central Bank of the Republic of Uzbekistan is a legal entity and is considered only state property. The Central Bank of the Republic of Uzbekistan - economic independent production, implementation on the basis of own production income, has a seal with the image of the State Emblem of the Republic of Uzbekistan and its name written on it. According to the law, "The main goal of the Central Bank is to ensure the national currency system." Ensuring national price freedom and stable currency exchange rates The role of the Central Bank of the Republic of Uzbekistan is very important in the economic policy of the state, and its

protection determines the importance of the bank to ensure the level of the national currency. The most important of them are:

- ✓ Monitor, adopt and implement monetary policy and currency management policy;

- ✓ Effective execution of calculations in the Republic of Uzbekistan ;

- ✓ Bank recovery and bank supervision;

- ✓ Maintaining and managing the official gold- currency place of the Republic of Uzbekistan ; \* Organizing cash flow of the state budget together with the Ministry of Finance. The content of the activity of the Central Bank is in its functions appears in full. Each function of the Central Bank needs to reflect a specific aspect of its activity as the main link of the country's bank, as a state body that regulates the economy through money and credit. Although there are significant differences in the banking legislation of the countries, the functions and tasks of the Central Bank have many common similarities. These similarities are especially evident in the functions of the central banks of a number of countries. The banks of the developed parts are traditionally managed from the beginning help functions :

- ✓ Emission function;

- ✓ "Bank of Banks" functions;

- ✓ "Bank of the State" function;

- ✓ Gold is a currency reserve management function. In general, central banks are deprived of certain ways of influencing the economy. Support for traditional products:

- ✓ Discount (account) and pledge policy;

- ✓ Mandatory Reserves Policy;

- ✓ Open Market Operations Policy;

- ✓ deposit policy;

- ✓ Currency policy and so on

But the composition of the meeting of the standard methods and the bank of different countries depends on the conditions, and the trial may be possible is known

that the state is used as the main reformer in regulating the economy . To do this, this function of the state should not be confused with the problems related to the hegemony of the state in the economy in the administrative system. The main rule of the market economy is to implement various policies for the development of the state economy. Developed countries show that the main manifestations of state policy implementation in the monetary and fiscal spheres. To implement the weapon in a certain way, as the hand is necessary for the organs. The powers of that body in the implementation of the policy are determined by the relevant laws. Without going away from the topic, let's talk about the central banks, the body that implements the monetary policy. (since the monetary policy is carried out by the bank in most of the central structures, we decided to call this body a bank) If we pay attention to the historical emergence, production and development of central banks, we are sure that the court emerged from commercial banks late. With the emergence of central banks the related reason is that the bank achieves the production process, that is, it is agreed that each bank independently and in the amount determined by itself issues different types and different denominations of money for circulation. In its effective circulation, money is equal to goods and material values and as a result, material banking, but also the entire economy, led to the derailment. This led to the issue of banks in the center. Strong, the right to issue acquired banking is strong and stable compared to other banks to be known it has been. Through this, the pure person who should exist in the banking system was lost and the intended result was not achieved. After that, economists realized the need to create a bank different from commercial banks. In this way, there was a need for the creation of central banks and legal documents.



**REFERENCES**

1. Махмуджон Зиядуллаев (2021). Право на социальное обеспечение в Узбекистане и радикальные реформы, проведенные в пенсионном секторе в 2017-2021 годах. Общество и инновации, 2 (8/S), 121-127. Doi: 10.47689/2181-1415-vol2-iss8/S-pp121-127 ;
2. Зиядуллаев, М. (2022). Роль социального обеспечения в стратегии развития Нового Узбекистана . Общество и инновации, 3(4/S), 120–125. <https://doi.org/10.47689/2181-1415-vol3-iss4/S-pp120-125> ;
3. MY Tirkashev, «THE ROLE OF SMALL SCALE BUSINESS IN THE DEVELOPMENT OF MARKET ECONOMY», МОЯ ПРОФЕССИОНАЛЬНАЯ КАРЬЕРА Учредители: Общество с ограниченной ответственностью” Моя профессиональная карьера”, 34, 2022, 97-102 с.;
4. M Yu Tirkashev, NB Eshtemirov, «FACTORS OF EFFECTIVE USE OF MECHANISMS TO IMPROVE FINANCIAL CONTROL», 2022, Вестник магистратуры, 3-2 (126), 111-112 с.;
5. Djurakulovich Ziyadullaev Makhmudjon. (2022). YESTERDAY’S, TODAY’S AND FUTURE PENSION REFORMS IN UZBEKISTAN. Conference Zone, 119–121. Retrieved from <http://www.conferencezone.org/index.php/cz/article/view/362>

## YOSHLARNI MILLIY G'OYA RUHIDA TARBIYALASHDA HARBIY VATANPARVARLIKNING O'RNI VA AHAMIYATI

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***Annotatsiya:** Maqolada yoshlarni vatanparvarlik ruhida tarbiyalash masalasining dolzarbligi, davlat siyosati markazida turganligi, bu borada olib borilayotgan islohotlarning muhim jihatlari hamda globallashtirish jarayonida yoshlarni harbiy vatanparvarlik ruhida tarbiyalashning an'anaviy va zamonaviy usullari yoritilgan.*

***Kalit so'zlar:** vatanparvarlik ruhida tarbiyalash, davlat siyosati, yoshlar, islohot, harakatlar strategiyasi, yoshlar ittifoqi, harbiy-ma'muriy sektor, globalizatsiya, axloq, an'anaviy va zamonaviy usullar.*

## В ВОСПИТАНИИ МОЛОДЕЖИ В ДУХЕ НАЦИОНАЛЬНОЙ ИДЕИ МЕСТО И ЗНАЧЕНИЕ ВОЕННОГО ПАТРИОТИЗМА

***Аннотация:** В статье рассмотрены актуальность воспитания молодежи в духе военного патриотизма, внимание к данному вопросу в государственной политике, важные аспекты проводимых в данной сфере реформ, а также традиционные и современные способы формирования у молодежи морали военного патриотизма с учетом современного процесса глобализации.*

**Ключевые слова:** воспитание в духе военного патриотизма, государственная политика, молодежь, реформа, стратегия действий, союз молодежи, военно-административный сектор, глобализация, мораль, традиционные и современные способы.

## IN EDUCATING YOUNG PEOPLE IN THE SPIRIT OF THE NATIONAL IDEA, THE PLACE AND IMPORTANCE OF MILITARY PATRIOTISM

**Abstract:** This article explores issues of educating youth in the spirit of patriotism and its essence in the state policy, significance of reforms being conducted in the state as well as traditional and modern ways of forming youth's military patriotic behaviour.

**Key words:** educating in the spirit of patriotism, state policy, youth, reforms, Strategy directions, Youth's union, military-administrative sector, globalization, morale, traditional and modern methods.

### KIRISH

Harbiy vatanparvarlik - umumxalq, umummilliy vatanparvarlikning alohida turi va ajralmas qismi bo'lib, u O'zbekistonning davlat mustaqilligini mustahkamlash sharoitida yana ham muhim ahamiyat kasb etadi. Shu bois harbiy vatanparvarlikning metodologik asoslari, ilmiy-nazariy xususiyatlarini o'rganish, tadqiq va tahlil qilish har doim dolzarb axloqiy masala bo'lib qolaveradi.

Yoshlarni milliy g'oya ruhida tarbiyalashda harbiy vatanparvarlikning o'rni va ahamiyati, harbiy vatanparvarlik tarbiyasi nafaqat mafkuraviy asoslarga, balki ijtimoiy, iqtisodiy, siyosiy, axloqiy asoslarga ham bog'liq. Zero, bugungi kunda harbiy vatanparvarlik tarbiyasi bevosita Qurolli Kuchlar tizimi, harbiy soha, davlat organlari va jamoat tashkilotlari orqali amalga oshirilsa-da, oila, mahalla va ta'lim muassasasi

uni bilvosita amalga oshirishga mas'ul hisoblanadi va bu borada har bir fuqaro milliy-ma'naviy va axloqiy jihatlarni yaxshi bilishi lozim.

### **ADABIYOTLAR TAHLILI VA METODOLOGIYA**

Hozirgi davrda harbiy vatanparvarlikning asosini - yurt tinchligi belgilab beradi. Bugungi tahlikali zamonda Qurolli Kuchlarimiz qudratini oshirish, milliy armiyamizni modernizatsiya qilish jarayonlarini yanada chuqurlashtirish, mamlakatimizning mudofaa qobiliyatini mustahkamlash, Vatanimiz sarhadlari daxlsizligini ko'z qorachig'iday asrash ushbu metodologiyaning asosiy sharti va kafolati hisoblanadi. Bu shartning axloqiy mohiyati quyidagi jihatlarni taqozo etadi:

1. Harbiy xizmatchilarning axloqiy ongi. Bu – xizmat jamoalarining manfaatlariga mos keluvchi axloqiy tushuncha, g'oya, qarash, ishonch, tuyg'u kabi hissiyotlar tizimidan iborat bo'lib, ularning jamiyatdagi, kundalik turmush, xizmat faoliyatidagi xatti-harakatlarida namoyon bo'ladi. Bu Vatanga bo'lgan muhabbat, burchga sadoqat, jamiyat oldida mas'ullik, milliy g'urur va iftixor hissiyotlaridir.

2. Harbiy xizmatchilar axloqi. Bu – vatanparvarlik, mardlik, eng zamonaviy jang qurollari va vositalarni bilish, ularni har qanday sharoitda qo'llay olish, jangovar o'rtoqlik qoidalariga sodiq bo'lib, jang maydonlarini tashlab ketmaslik, harbiy qasamyodga sodiq qolib, harbiy burchni hayotining so'nggi daqiqalariga qadar bajarish kabi xususiyati bilan ajralib turadi. Yuqoridagi tamoyillar hozirgi davrda harbiy vatanparvarlik ona yurtning, xalqning tarixi va taqdiriga chuqur hurmat bilan qaraydigan, Vatan manfaatlarini yo'lida fidoyilik namunalarini ko'rsatishga qodir bo'lgan yoshlarga xos fazilatga aylanishini talab etmoqda.

### **NATIJALAR VA MUHOKAMA.**

Chunki, Vatanga muhabbat va uning kelajagiga ishonch umumxalq manfaatlariga qaratilgan yagona maqsad asosida shakllangandagina harbiy vatanparvarlik o'z taqdirini Vatan, millat taqdiri bilan bog'lagan barcha kishilar fazilatiga aylanadi. Ta'kidlash joizki, harbiy vatanparvarlik milliy merosimizning qadimiy tarixi va

ma'naviy manbalariga borib ulanadi. Jumladan, "Avesto" adabiy yodgorligida, "Go'ro'g'li", "Alpomish" singari qahramonlik dostonlarida, "Temur tuzuklari", "Mahbub ul-qulub", "Turkiy Guliston yohud axloq" kabi ijtimoiy-axloqiy pandnomalarda harbiy vatanparvarlik g'oyalarining targ'iboti bilan bog'liq masalalarni axloqshunoslik kontekstida o'rganish g'oyatda dolzarbdir. Chunki, yoshlarda g'urur, or-nomus, sha'n, ishonch va sadoqat kabi axloqiy fazilatlarni shakllantirish bevosita harbiy vatanparvarlik shartlari asosida reallikka aylanadi. Bundan tashqari, Spitamen, Jaloliddin Manguberdi, Najmiddin Kubro, Temur Malik, Amir Temur, Zahiriddin Muhammad Bobur kabi bobokalonlarimizning harbiy vatanparvarligini axloqiy ideal sifatida ulug'lash, ularning vatanparvarlik fazilati bilan bog'liq axloqiy qarashlari va hayotiy faoliyatlari aks etgan manbalarni chuqurroq tahlil qilish yoshlarda harbiy vatanparvarlikni yanada yuksaltirishga xizmat qiladi.

Ta'kidlash zarurki, o'zbek xalqining milliy-ma'naviyati va axloqiy qadriyatlarida harbiy vatanparvarlik yurt tarixi, taqdiriga chuqur hurmat bilan qarash, Vatan himoyasi yo'lida fidoyilik namunalarini ko'rsatishga qodir bo'lgan shaxslarga xos fazilat sifatida qadrlanadi. Bu tuyg'u "muhabbat", "ishonch", "sadoqat" kabi ma'naviy va axloqiy tushunchalar asosida shakllanib, kishilarning qalbidan chuqur o'rin olganligi uchun ham davrlar mobaynida o'z mavqeini yo'qotmay kelayotgan falsafiy kategoriyadir. Vatanparvarlik o'zida birlashtirish, yo'naltirish, jipslashtirish, safarbar qilish kabi axloqiy sifatlarni mujassam etgani uchun o'zbek xalqi ma'naviy merosiga taalluqli barcha manbalarda ulug'lanadi.

Bundan yuksak ma'naviy qadriyatimiz hisoblangan Islom dini ham mustasno emas. Bugungi kunda mamlakatimizda olib borilayotgan islohotlar samarasi, avvalambor, yuksak ma'naviyatli, mustaqil fikrlaydigan, Vatanimiz taqdiri va istiqboli uchun mas'uliyatni o'z zimmasiga olishga qodir yosh kadrlar safini kengaytirishga bevosita bog'liq. Bugungi kunda yosh avlodning Vatan va uning kelajagi haqidagi o'y-fikrlari, vatanparvarlik tuyg'usini his qilishi, avvalo:

- shaxsiy manfaatlarini Vatan manfaatlari bilan bog'lashda;
- milliy g'urur va milliy iftixor tuyg'usining mustahkamligida;

- Vatan ravnaqi yo'lida fidoyilik ko'rsatishida;
- yurt tinchligini asrash, himoya qilish uchun kurashda yaqqol namoyon bo'ladi.

### **XULOSA:**

Xulosa o'rnida aytish mumkinki, vatanparvarlik faqat insonga xos xususiyat bo'lib, ma'no-mazmuni jihatidan ma'naviy fazilatlar turkumiga kiradi. Uning axloqiy asosini muhabbat – burch - fidoiylik o'rtasidagi o'zaro dialektik bog'langan ijtimoiy-ma'naviy faoliyat tashkil etadi. Prezidentimiz Sh.M.Mirziyoyev ta'biri bilan aytganda, vatanparvarlik xalqimizning azaliy qadriyatlaridan hisoblanadi. U mehr-oqibat, Vatan taqdiri uchun qayg'urish, tashvish va falokatlarga hamdardlik kabi axloqiy fazilatlar sirasiga kiradi. Ayniqsa, harbiy vatanparvarlik umumxalq, umummilliy vatanparvarlikning alohida turi va ajralmas bo'lagidir.

Harbiy vatanparvarlik g'oyalarini yoshlar qalbiga singdirish O'zbekiston Respublikasining davlat siyosatida yana ham muhim ahamiyat kasb etadi

### **FOYDALANILGAN ADABIYOTLAR**

1. O'zbekiston Respublikasi Prezidenti Shavkat Mirziyoyevning Xavfsizlik kengashining kengaytirilgan tarkibdagi majlisidagi nutqi // Xalq so'zi, 3-soni. - 2017 yil. 10 yanvar.
2. O'zbekiston Respublikasi Vazirlar Mahkamasining 2018 yil 23 fevral kuni tasdiqlangan "Yoshlarni harbiy-vatanparvarlik ruhida tarbiyalash konsepsiya" Vatanparvar gazetasining № 9 (2760) – soni, 2018 yil 2 mart.
3. Mirziyoyev Sh.M. Jismoniy va ma'naviy yetuk yoshlar – ezgu maqsadlarimizga yetishda tayanchimiz va suyanchimizdir // [www.prezident.uz](http://www.prezident.uz).

**BIRINCHI TARTIBLI BIR JINSLI DIFFERENSIAL TENGLAMALAR****Toshpo‘latova Shaxlo Ulug‘bek qizi**

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**Annotatsiya:** Bugungi kunda matematikaning differensial tenglamalar bo‘limi juda rivojlanmoqda. Ta’lim sohasida esa alohida e’tibor qaratilmoqda. Shu bilan birgalikda differensial tenglamalar orqali ko‘pgina masalalar o‘z yechimini topmoqda. Ushbu maqolada birinchi tartibli bir jinsli differensial tenglamalar haqida ma’lumot va bunday ko‘rinishdagi tenglamalarni qanday ishlash bir nechta misol yordamida ko‘rsatib o‘tilgan.

**Kalit so‘zlar:** differensial tenglamalar, bir jinsli differensial tenglamalar, uzluksiz funksiyalar, umumiy yechim, o‘zgaruvchilari ajraladigan differensial tenglamalar, integral, birinchi tartibli bir jinsli differensial tenglamalar.

**Annotation:** Today, the branch of differential equations of mathematics is developing very much. Special attention is being paid in the field of education. At the same time, many problems are being solved through differential equations. This article provides information on first-order homogeneous differential equations and how to work with equations of this form using several examples.

**Key words:** differential equations, homogeneous differential equations, continuous functions, general solution, differential equations with separable variables, integral, homogeneous differential equations of the first order.

**Ta’rif.** Ushbu  $y' = f(x, y)$  tenglama bir jinsli tenglama deyiladi, agar  $f(x, y)$  funksiyani argumentlarining nisbati orqali ifodalash mumkin bo‘lsa, ya’ni:



$$y' = f\left(1, \frac{y}{x}\right)$$

Yoki

$$y' = f\left(\frac{y}{x}\right) \quad (1)$$

Misol uchun,  $(xy - y^2)dx - (x^2 - 2xy)dy = 0$

Tenglama bir jinsli tenglamadir. Haqiqatdan ham bu ifodani ushbu ko‘rinishda yozish mumkin:

$$\frac{dy}{dx} = \frac{xy - y^2}{x^2 - 2xy} = \frac{\frac{y}{x} - \left(\frac{y}{x}\right)^2}{1 - 2\frac{y}{x}}$$

(1) Tenglamada  $x \neq 0$ ,  $f\left(\frac{y}{x}\right)$  funksiya  $x$  va  $y$  ning barcha qaralayotgan qiymatlarida uzluksizdir. Bu tenglama

$$\frac{y}{x} = u, \quad y = ux, \quad y' = xu' + u$$

O‘rniga qo‘yish bilan o‘zgaruvchilari ajraladigan tenglamaga keltiriladi.

$$xu' + u = \varphi(u)$$

Yoki

$$x \frac{du}{dx} = \varphi(u) - u$$

Bundan quyidagi o‘zgaruvchilari ajralgan tenglama hosil bo‘ladi:

$$\frac{du}{\varphi(u) - u} = \frac{dx}{x}$$

**1. Misol.**  $xdy - ydx = ydy$

$$(x - y)dy = ydx$$

$$\left(1 - \frac{y}{x}\right) \frac{dy}{dx} = \frac{y}{x}$$

Quyidagicha belgilash kiritamiz:

$$\frac{y}{x} = u, \quad y = ux, \quad y' = xu' + u$$

Yoki

$$\frac{dy}{dx} = x \frac{du}{dx} + u$$

$$(1 - u) \left( x \frac{du}{dx} + u \right) = u$$

$$\frac{1}{u^2} du - \frac{1}{u} du = \frac{dx}{x}$$

Ushbu birinchi tartibli bir jinsli differensial tenglamani ikkala tomonini integrallab:

$$\int \frac{1}{u^2} du - \int \frac{1}{u} du = \int \frac{dx}{x}$$

Quyidagiga ega bo'lamiz:

$$-\frac{1}{u} - \ln u = \ln x + \ln C$$

$\frac{y}{x} = u$  ifodani o'rniga qaytarib olib kelib qo'ysak, quyidagi yechimga ega bo'lamiz:

$$-\frac{x}{y} - \ln \frac{y}{x} = \ln(xC)$$

Tenglama umumiy yechimga ega bo'ldi.

2. **Misol.**  $y' = \frac{x+y}{x-y}$  tenglamani yeching.

$$\frac{dy}{dx} = \frac{x+y}{x-y}$$

Tenglikning o'ng tarafini  $x$  ga bo'lamiz:

$$\frac{dy}{dx} = \frac{1 + \frac{y}{x}}{1 - \frac{y}{x}}$$

$$\frac{y}{x} = u, \quad y = ux, \quad y' = xu' + u$$

$$\text{yoki} \quad \frac{dy}{dx} = x \frac{du}{dx} + u \Rightarrow x \frac{du}{dx} + u = \frac{1+u}{1-u} \Rightarrow x \frac{du}{dx} = \frac{1+u}{1-u} - u$$

$$x \frac{du}{dx} = \frac{1+u-u+u^2}{1-u}$$

$$\frac{1-u}{1+u^2} du = \frac{dx}{x}$$

Tenglikning ikkala tarafini integrallaymiz:

$$\arctg u - \frac{1}{2} \ln|1+u^2| = \ln x + \ln C$$

$$\arctg \frac{y}{x} - \frac{1}{2} \ln \left| 1 + \left( \frac{y}{x} \right)^2 \right| = \ln x + \ln C$$

Tenglama quyidagi umumiy yechimga ega bo'ladi:

$$\arctg \frac{y}{x} - \frac{1}{2} \ln \left| 1 + \left( \frac{y}{x} \right)^2 \right| = \ln x C$$

**3. Misol.**  $xy' = 3y - x$  tenglamani yeching.

$$x \frac{dy}{dx} = 3y - x$$

Tenglikning ikkala tarafini ham  $x$  ga bo'lamiz:

$$\frac{dy}{dx} = 3 \frac{y}{x} - 1$$

Quyidagicha belgilash kiritamiz:

$$\frac{y}{x} = u, \quad y = ux, \quad y' = xu' + u$$

Yoki

$$\frac{dy}{dx} = x \frac{du}{dx} + u$$

$$x \frac{du}{dx} + u = 3u - 1$$

$$x \frac{du}{dx} = 3u - u - 1$$

$$x \frac{du}{dx} = 2u - 1$$

$$\frac{du}{2u-1} = \frac{dx}{x}$$

Tenglikning ikkala tarafini ham integrallaymiz va quyidagi natijani hosil qilamiz:

$$\frac{1}{2} \ln|2u-1| = \ln x + \ln C$$

$$\ln|2u-1|^{\frac{1}{2}} = \ln x + \ln C$$

Tenglikning ikkala tarafini ham logarifmlaymiz:

$$|2u-1|^{\frac{1}{2}} = |xC|$$

$\frac{y}{x} = u$  belgilashni o'rniga qo'yamiz:

$$\left|2\frac{y}{x}-1\right|^{\frac{1}{2}} = xC$$

Ko'rinishdagi umumiy yechimga ega bo'lamiz.

1. Филиппов А.Ф. «Сборник задач по дифференциальным уравнениям» 2000.

#### О'YXATI

2. Степанов В.В. «Курс дифференциальных уравнений» Москва 1987

3. А.Тожибойев, А.Маматов “Oddiy differensial tenglamalar” 2009

## STATUS OF PROVERBS AND SAYINGS IN THE PARAMEIOLOGICAL SYSTEM OF LANGUAGES

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**Abstract:** *The study of phraseology allows to delve deeper into the past of language and culture, the history of the creative people. In addition, the study of phraseology helps to better understand the diverse and complex nature of stable word combinations. It is known that the organization of figurative means composed of the phraseological form of the name has its own national characteristics in each language and is manifested in the specific features of the meaning of the phraseological unit, the grammatical model, its lexical structure and usage features.*

**Key words:** *phraseology, paramia, lexical-grammatical content, proverb, proverb, metaphor.*

**Annotatsiya:** *Frazeologiyani o'rganish til va madaniyatning o'tmishiga, yaratuvchi xalqning tarixiga chuqurroq kirib borishga imkon beradi. Bundan tashqari, frazeologiyani o'rganish barqaror so'z birikmalarining xilma-xil va murakkab tabiatini aniqroq tushunishga yordam beradi. Ma'lumki, ismning frazeologik shaklida tuzilgan majoziy vositalarni tashkil etish har bir tilda o'ziga xos milliy xususiyatga ega bo'lib, frazeologik birlik ma'nosining o'ziga xos xususiyatlarida, grammatik modelda, uning leksik tarkibida va foydalanish xususiyatlarida namoyon bo'ladi.*

**Kalit so'zlar:** *frazeologiya, paramiya, leksik-grammatik tarkib, maqol, matal, metafora.*

**Introduction:** To date, the question of the status of phraseology as a scientific discipline in research has not been fully clarified. Phraseology has long attracted the attention of both ordinary native speakers who use its expressive means, and scientists who reveal the secrets of this unique linguistic phenomenon.

N.K. Kazhekenova writes that phraseology plays a special role in the formation of the linguistic picture of the world, in which the cultural-national worldview is embodied, and the phraseological units themselves acquire the role of cultural stereotypes [1: 220-221].

Phraseological units are understood as semantically non-free combinations of words that are not produced in speech, but are reproduced in a stable relationship between semantic content and a certain lexical and grammatical composition assigned to them [2:370]. The study of phraseology allows you to penetrate deeper into the past of both language and culture, the history of the creator people. In addition, the study of phraseology contributes to a more accurate understanding of the diverse and complex nature of stable combinations of words. It is known that the organization of figurative means contained in the phraseological form of a name has its own national character in each language, manifested in the specific meaning of the phraseological unit, in the grammatical model, in its lexical composition and features of use.

**Main part:** Most linguists classify proverbs and sayings as part of the phraseological fund of the language. This point of view was put forward by V.V.Vinogradov, who wrote: “The area of phraseological unities includes many phrase cliches, cliches typical of different literary styles, and literary quotations, and popular expressions, and folk proverbs and sayings [3: 133].

There is another understanding of the relationship between proverbs, sayings and phraseological units.

Z.K.Tarlanov writes that most researchers rightly distinguish a proverb from a phraseological unit based on four characteristics:

- 1) the inability to identify a proverb using synonymous words;
- 2) a proverb always has the form of a sentence;

3) a proverb always expresses a judgment (or a series of judgments) if it has the form of a complex sentence;

4) the proverb summarizes the experience of people's lives, formalizing it in the form of certain rules [10:31-32].

G.T.Permakov notes the difference between phraseological expressions and words, on the one hand, and proverbs and sayings, on the other: the former are characterized by him as "signs of concepts", and the latter as "signs of situations" [11: 262-263]. Indeed, such a distinction is intuitively clear, but in some specific cases it can be difficult to decide whether a given open expression is a phraseological unit or a saying.

O.A.Kornilov, revealing the deep etymology of a phraseological unit, uses the principle of a "locomotive". The proverb, according to the scientist, is a "train" to which a researcher can attach many "cars" with cultural-historical and historical-philosophical information [12:56]. It is impossible to apply the "locomotive" principle to phraseological units.

According to V.P.Zhukov, the peculiarity of proverbs is that they retain two planes - literal and figurative. For example, the proverb "You can't spoil porridge with butter" can be understood in the literal sense: the fatter the porridge, the tastier it is. But it is often used in an allegorical sense, when it is necessary to emphasize that what is necessary and useful will not harm the cause even in excess. Phraseologisms are deprived of this possibility: they cannot be used simultaneously in a literal and figurative meaning [4:9-10]. One of the most important issues in paremiology is the issue of distinguishing between proverbs and sayings.

V.I.Dal distinguished proverbs and sayings on the basis of their structural, semantic and functional features. The scientist considered the proverb "a short parable, a teaching, understandable and accepted by everyone, expressed in a roundabout way, that is, allegorically" [6:9]. He defined a proverb as follows: "A proverb is a roundabout expression, a simple allegory, a circumlocution, a way of expression, but



without a parable, without judgment, conclusion, application; this is the first half of the proverb” [7:15].

Thus, a proverb does not contain a judgment, and therefore it usually has the structure not of a sentence, but of a phrase. For example, the expressions “not everyone is at home”, “one rivet is missing” have the meaning of the word “stupid”. From the point of view of V.I. Dahl, the proverb, being a roundabout expression, a simple allegory, is “inserted into speech for the sake of a catchphrase” and serves as a decoration for speech.

A. Martynova claims that “a proverb is a complete sentence, a completed judgment, and a saying is an element of judgment, often allegorical, a figurative definition of something” [7:9].

O. Shirokova classifies stable folk sayings that have a figurative meaning as proverbs, and folk sayings that do not have a figurative meaning as sayings. “The main difference between a proverb and a saying,” she writes, is considered to be the figurative meaning that a proverb has, and the proverb’s lack of it” [8:117].

G.L. Permyakov comes to the conclusion that a proverb is an open sentence, replenished from the speech context, and a saying is a closed sentence consisting of only constant members [9:18]. Thus, proverbs and sayings are very close. Their difference lies in the fact that a proverb expresses a complete thought; it presents a judgment with a conclusion.

**Conclusion:** A proverb is only an apt, expressive image; it does not contain the high degree of generalization characteristic of a proverb. The features of these two types of sayings are reflected in their proverbial definition: A saying is a flower, a proverb is a berry. The proverb is not a “ripe fruit” that has the potential to evolve into a higher form of popular thought. Proverbs, sayings, aphorisms and phraseological units - small genres of folklore - are collectively called *paremias* and occupy a special place among works of oral folk art.

Despite all the differences between proverbs and sayings, they are united by the brevity and stability of the form, the amazing capacity of the content, the mainly

metaphorical principle of constructing images, the rhythmic structure, and the antiquity of origin. Proverbs are a logical system. Taking into account multifunctionality of paremiological units, it should be noted that they are not always differentially used along with the usual established combinations. Proverbs are considered as a closed structure, having direct, direct and figurative, or only figurative meaning.

### References

1. Кажекенова Н.К. Освоение языковой картины мира в процессе преподавания языка. – Казань: Казань, 2004.
2. Щукин А.Н. Лингво дидактический энциклопедический словарь. – М.: Астрель, 2007.
3. Виноградов В.В. Избранные труды: Лексикология и лексикография. – М.: Наука, 1977.
4. Жуков К.А. Языковое воплощение концепта «труд» в пословичной картине мира (на материале русской и английской паремиологии). АКД. – Великий Новгород, 2007.
5. Pineaux J. Proverbes et dictons francais. – Paris, 1956.
6. Мартынова А.Н. Пословицы. Поговорки. Загадки. – М.: Современник, 1986.
7. Даля В. Пословицы русского народа. – М.: Худож. лит., 1989.
8. Широкова О. Жизнь пословицы. Русский язык в школе. – М., 1931.
9. Пермяков Г.Л. Основы структурной паремиологии. – М.: Наука, 1988.
10. Тарланов З.К. Становление типологии русского предложения в его отношении к этнофилософии. – Петрозаводск, 1999.
11. Пермяков Г.Л. О паремиологическом уровне языка и русском паремиологическом минимуме. – М.: Вост. лит., 1984.
12. Корнилов О.А. Доминанты национальной ментальное в зеркале фразеологии. – М., 2007.

13. Ахмедова, Ш. (2021). Новые художественно-методологические принципы сторителлинга в ОАЭ. *Востоковедения*, 1(1), 4–13. извлечено от <https://inlibrary.uz/index.php/oriental-studies/article/view/15813>

14. Akhmedova, Shakhlo Irgashbayevna FORMATION AND IMPROVEMENT OF REALISTIC STORY IN KUWAIT AND BAHRAIN LITERATURE // ORIENSS. 2022. №6. URL: <https://cyberleninka.ru/article/n/formation-and-improvement-of-realistic-story-in-kuwait-and-bahrain-literature> .

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1	<b>Tastanova, A. A. qizi . (2024). ALISHER NAVOIY – G‘AZAL MULKINING SULTONI. GOLDEN BRAIN, 2(5), 4–9.</b> <a href="https://doi.org/10.5281/zenodo.10669569">https://doi.org/10.5281/zenodo.10669569</a>
2	<b>Raximov, O. D. (2024). GLOBALASHUV DAVRIDA TA’LIM TIZIMI MUAMMOLARI. GOLDEN BRAIN, 2(5), 10–16.</b> <a href="https://doi.org/10.5281/zenodo.10669590">https://doi.org/10.5281/zenodo.10669590</a>
3	<b>Хамраев, М. А. (2024). НЕКОТОРЫЕ СООБРАЖЕНИЯ О ВЫРАЖЕНИИ ОТНОШЕНИЙ ЧАСТЕЙ В МОНОСУБЪЕКТИВНЫХ ПОЛИПРЕДИКАТИВНЫХ ПРЕДЛОЖЕНИЯХ. GOLDEN BRAIN, 2(5), 17–20.</b> <a href="https://doi.org/10.5281/zenodo.10669606">https://doi.org/10.5281/zenodo.10669606</a>
4	<b>Хамраев, М. А. (2024). НЕКОТОРЫЕ СООБРАЖЕНИЯ О СПОСОБАХ СОЕДИНЕНИЯ ЧАСТЕЙ МОНОСУБЪЕКТИВНЫХ ПОЛИПРЕДИКАТИВНЫХ ПРЕДЛОЖЕНИЙ. GOLDEN BRAIN, 2(5), 21–25.</b> <a href="https://doi.org/10.5281/zenodo.10669620">https://doi.org/10.5281/zenodo.10669620</a>
5	<b>Bazarbayeva, R. F. (2024). PREPOSITIONS IN ENGLISH GRAMMAR AND ITS MEANING. GOLDEN BRAIN, 2(5), 26–31.</b> <a href="https://doi.org/10.5281/zenodo.10669634">https://doi.org/10.5281/zenodo.10669634</a>
6	<b>Хайриддинова, Р. В. qizi . (2024). МАКТАБГАЧА YOSHDAGI BOLALARDA MO‘LJAL OLI SH QOBILYATINI SHAKLLANTIRISHNING O‘ZIGA XOS XUSUSIYATLARI. GOLDEN BRAIN, 2(5), 32–37.</b> <a href="https://doi.org/10.5281/zenodo.10669643">https://doi.org/10.5281/zenodo.10669643</a>
7	<b>Oripov, R. A. (2024). ALOPECIA AND PEROXIDATION OF LIPIDS AND ENZYMES OF THE ANTIOXIDANT SYSTEM. GOLDEN BRAIN, 2(5), 38–43.</b> <a href="https://doi.org/10.5281/zenodo.10669655">https://doi.org/10.5281/zenodo.10669655</a>
8	<b>Salamova, L. A. (2024). USE OF DERMATOSCOPIC METHOD FOR DIFFERENTIAL DIAGNOSIS OF FUNGAL DISEASES AND ALOPECIA IN ADOLESCENTS. GOLDEN BRAIN, 2(5), 44–50.</b> <a href="https://doi.org/10.5281/zenodo.10672101">https://doi.org/10.5281/zenodo.10672101</a>

9

Mamasolieva, S. A., & Xegay, R. O. (2024). PREVENTIVE MEASURES FOR A HEALTHY LIFESTYLE AMONG YOUNG PEOPLE IMPROVING THE EFFECTIVENESS. GOLDEN BRAIN, 2(5), 51–58.

<https://doi.org/10.5281/zenodo.10669693>

10

Mamasolieva, S. A., & Xegay, R. O. (2024). RIVOJLANGAN MAMLAKATLARNING JAXON TAJRIBALARI VA ULARNING TAXLILI TURIZM SOHASINI RIVOJLANTIRISHDA. GOLDEN BRAIN, 2(5), 59–71.

<https://doi.org/10.5281/zenodo.10669701>

11

Narzikulov, R. M., Abdiev, J. O., & Gayratov, M. B. (2024). TOPICAL USE OF PIMICRALIMUS FOR THE TREATMENT OF PSORIASIS. GOLDEN BRAIN, 2(5), 72–78. <https://doi.org/10.5281/zenodo.10669717>

12

Narzikulov, R. M., Abdiev, J. O., & Gayratov, M. B. (2024). INDICATORS OF QUALITY OF LIFE IN PATIENTS WITH SYPHILIS BEFORE AND AFTER TREATMENT. GOLDEN BRAIN, 2(5), 79–85.

<https://doi.org/10.5281/zenodo.10669725>

13

Oripov, R. A. (2024). STUDYING THE CLINICAL AND IMMUNOLOGICAL NATURE OF THE COURSE OF FORMS OF SYPHILIS. GOLDEN BRAIN, 2(5), 86–92.

<https://doi.org/10.5281/zenodo.10669752>

14

Achilova, F. A., Jalilov, A. X., & Islamov, N. H. (2024). PYODERMA ASSOCIATED WITH ALLERGODERMATOSIS, ASSESSMENT OF THE QUALITY OF THERAPY. GOLDEN BRAIN, 2(5), 93–100.

<https://doi.org/10.5281/zenodo.10669773>

15

Utayev, A. J., Klebleyeva, G. D., Axmedova, M. M., & Abdullaev, X. D. (2024). TO EVALUATE THE PATHOGENESIS OF ATOPIC DERMATITIS: THE ROLE OF GENETIC FACTORS. GOLDEN BRAIN, 2(5), 101–106. <https://doi.org/10.5281/zenodo.10669784>

16

Ruziyev, K. T., Klebleyeva, G. D., Axmedova, M. M., & Abdullaev, X. D. (2024). EXAMINING GENETIC POLYMORPHISM IN INDIVIDUALS WITH VIRAL IMMUNITY. GOLDEN BRAIN, 2(5), 107–115.

<https://doi.org/10.5281/zenodo.10669796>

17

Ruziyev, K. T., Klebleyeva, G. D., Axmedova, M. M., & Abdullaev, X. D. (2024). INVESTIGATION OF THE MICROELEMENT CONTENT OF PATIENTS' HAIR WITH DIFFUSE ALOPECIA. GOLDEN BRAIN, 2(5), 116–121. <https://doi.org/10.5281/zenodo.10669806>

18

Ruziyev, K. T., Klebleyeva, G. D., Axmedova, M. M., & Abdullaev, X. D. (2024). COMBINATIVE TREATING METHODS FOR PAPILLOMAVIRUS INFECTION. GOLDEN BRAIN, 2(5), 122–127. <https://doi.org/10.5281/zenodo.10669820>

19

Ruziyev, K. T., Klebleyeva, G. D., Axmedova, M. M., & Abdullaev, X. D. (2024). WHEN PATIENTS RECEIVE A FORMAL DIAGNOSIS OF HERPES, THE PRESENCE OF ANTIBODIES TO HIV INFECTION IS OBSERVED. GOLDEN BRAIN, 2(5), 128–133. <https://doi.org/10.5281/zenodo.10669851>

20

Ruziyev, K. T., Klebleyeva, G. D., Axmedova, M. M., & Abdullaev, X. D. (2024). PROMOTING A WELL-ROUNDED LIFESTYLE FOR SCHOOL KIDS AND COLLEGE STUDENTS. GOLDEN BRAIN, 2(5), 134–139. <https://doi.org/10.5281/zenodo.10669875>

21

Utayev, A. J., Klebleyeva, G. D., Axmedova, M. M., & Abdullaev, X. D. (2024). FRESH PERSPECTIVE ON THE PROGRESSION OF SEXUALLY TRANSMITTED INFECTIONS. GOLDEN BRAIN, 2(5), 140–145. <https://doi.org/10.5281/zenodo.10669899>

22

Utayev, A. J., Klebleyeva, G. D., Axmedova, M. M., & Abdullaev, X. D. (2024). UTILIZATION OF SEVORAN IN MANAGING LICHEN PLANUS: AN EXPERIENTIAL PERSPECTIVE. GOLDEN BRAIN, 2(5), 146–150. <https://doi.org/10.5281/zenodo.10669951>

23

Utayev, A. J., Klebleyeva, G. D., Axmedova, M. M., & Abdullaev, X. D. (2024). EXPERIENTIAL PERSPECTIVE ON THE APPLICATION OF TACROLIMUS IN ATOPIC DERMATITIS TREATMENT. GOLDEN BRAIN, 2(5), 151–157. <https://doi.org/10.5281/zenodo.10669967>

24

Utayev, A. J., Klebleyeva, G. D., Axmedova, M. M., & Abdullaev, X. D. (2024). EXPERIENTIAL PERSPECTIVE ON THE APPLICATION OF TACROLIMUS IN ATOPIC DERMATITIS TREATMENT. GOLDEN BRAIN, 2(5), 151–157. <https://doi.org/10.5281/zenodo.10669967>



25

Utayev, A. J., Klebleyeva, G. D., Axmedova, M. M., & Abdullaev, X. D. (2024). EXPERIENTIAL PERSPECTIVE ON THE APPLICATION OF TACROLIMUS IN ATOPIC DERMATITIS TREATMENT. GOLDEN BRAIN, 2(5), 151–157. <https://doi.org/10.5281/zenodo.10669967>

26

Xurramova, M. A. qizi . (2024). BOSHLANG'ICH SINFI ONA TILI DARSLARIDA SO'Z TARKIBI VA YASALISHINI O'QITISHNING MUHIM AHAMIYATLARI. GOLDEN BRAIN, 2(5), 173–178. <https://doi.org/10.5281/zenodo.10670046>

27

Икрамова, М. (2024). ТРАДИЦИОННЫЕ ЛЕКСИЧЕСКИЕ СРЕДСТВА ВЫРАЗИТЕЛЬНОСТИ В РУССКИХ НАРОДНЫХ СКАЗКАХ. GOLDEN BRAIN, 2(5), 179–185. <https://doi.org/10.5281/zenodo.10670063>

28

Юнусова, Ш. (2024). ПРИМЕНЕНИЕ КОМПЬЮТЕРНЫХ ТЕХНОЛОГИЙ НА УРОКАХ РУССКОГО ЯЗЫКА. GOLDEN BRAIN, 2(5), 186–189. <https://doi.org/10.5281/zenodo.10670072>

29

Юсупов, Р. Р., Алимов, Х. Т., Хужаев, Д. Х., & Алтаева, Л. (2024). ДЕФЕКТЫ И ПОВРЕЖДЕНИЯ ЖЕЛЕЗОБЕТОННЫХ КОНСТРУКЦИЙ КАРКАСНЫХ ЗДАНИЙ В СЕЙСМИЧЕСКИХ РАЙОНАХ. GOLDEN BRAIN, 2(5), 190–200. <https://doi.org/10.5281/zenodo.10670088>

30

Mamarasulova, N. I., Abdullayev, T. X. o'g'li ., & Mamatqulova, M. Y. qizi . (2024). LAGOCHILUS PROSKORIAKOVA – DORIVOR O'SIMLIGINING BIOLOGIK XUSUSIYATLARI. GOLDEN BRAIN, 2(5), 201–206. <https://doi.org/10.5281/zenodo.10670145>

31

Kendjayeva, D. K. (2024). ZAMONAVIY TA'LIMDA RAQAMLI TEXNOLOGIYALAR VA SUN'YIY INTELLEKT TEXNOLOGIYALARIDAN FOYDALANISH. GOLDEN BRAIN, 2(5), 207–213. <https://doi.org/10.5281/zenodo.10670190>

32

Madjidova, R. U., & Akramova, M. U. qizi . (2024). LINGUACULTUROLOGY AS A MODERN BRANCH OF LINGUISTICS. GOLDEN BRAIN, 2(5), 214–216. <https://doi.org/10.5281/zenodo.10670200>

33

Akhmedova, A. U. kizi . (2024). LEVERAGING TECHNOLOGY TO ENHANCE ENGLISH LANGUAGE LEARNING CAPABILITIES. GOLDEN BRAIN, 2(5), 217–224. <https://doi.org/10.5281/zenodo.10670219>



34

**Botirova, B. T., Naimova, S. I., & Botirova, F. T. (2024). KIMYO SANOATINING ATROF-MUHITGA VA ORGANIZMLARGA TA'SIRI. GOLDEN BRAIN, 2(5), 225–233. <https://doi.org/10.5281/zenodo.10670238>**

35

**Raufov, Q. X. o'g'li . (2024). FUNCTIONS OF THE CENTRAL BANK AND COMMERCIAL BANKS. GOLDEN BRAIN, 2(5), 234–241. <https://doi.org/10.5281/zenodo.10670260>**

36

**Nazimov, R. N. (2024). YOSHLARNI MILLIY G'OYA RUHIDA TARBIYALASHDA HARBIY VATANPARVARLIKNING O'RNI VA AHAMIYATI. GOLDEN BRAIN, 2(5), 242–246. <https://doi.org/10.5281/zenodo.10670267>**

37

**Toshpo'latova, S. U. qizi . (2024). BIRINCHI TARTIBLI BIR JINSLI DIFFERENSIAL TENGLAMALAR. GOLDEN BRAIN, 2(5), 247–251. <https://doi.org/10.5281/zenodo.10671695>**

38

**Abdullaeva, S. B. kizi . (2024). STATUS OF PROVERBS AND SAYINGS IN THE PARAMEIOLOGICAL SYSTEM OF LANGUAGES. GOLDEN BRAIN, 2(5), 252–257. <https://doi.org/10.5281/zenodo.10672093>**