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JISMONIY TARBIYA VA SPORT TA'LIMINI LOYIHALASHTIRISHNI TAKOMILLASHTIRISH ASOSLARI

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Annotatsiya: Jismoniy tarbiya fanlarini rejalashtirishda o'quvchilarning muayyan kontingenti bilan bo'lajak faoliyatning maqsad va vazifalarini, mazmuni, metodologiyasi, tashkil etish shakllari va usullarini oldindan ishlab chiqiladi va aniqlanadi. Rejalashtirish chuqur, ko'p qirrali kasbiy bilim va amaliy tajribani talab qiladi va har doim ijodiy yondashuvni o'z ichiga oladi, chunki u uslubiy ko'rsatmalarning qat'iy doirasi bilan belgilanmagan.

Kalit so'zlar: jismoniy tarbiya, komil inson, musobaqa, murabbiy, jismoniy tarbiya, aqliy tarbiya sport.

Аннотация: При планировании предметов по физическому воспитанию заранее разрабатываются и определяются цели и задачи, содержание, методика, формы организации и методы будущей деятельности с определенным контингентом учащихся. Планирование требует глубоких, многогранных профессиональных знаний и практического опыта и всегда предполагает творческий подход, так как не определяется жесткими рамками методических указаний.

Ключевые слова: физическое воспитание, совершенный человек, конкуренция, тренер, физическое воспитание, психическое воспитание, спорт.

Annotation: In the planning of physical education subjects, the goals and objectives, content, methodology, organization forms and methods of future activities with a certain contingent of students are developed and determined in advance. Planning requires deep, multifaceted professional knowledge and practical experience, and always includes a creative approach, as it is not defined by a strict framework of methodological guidelines.

Keywords: physical education, perfect person, competition, coach, physical education, mental education, sport.

Jismoniy tarbiya fanlarini rejalashtirish muddatiga qarab quyidagi turlar ajratiladi: uzoq muddatli, joriy (bosqichma-bosqich) va operatsionga bo‘linadi.

Uzoq muddatli rejalashtirish - bu uzoq muddatli rejalashtirish, odatda bir necha yil bo‘ladi. Bir yil davomida ta'lim muassasalarida amalga oshiriladi.

Joriy (bosqichma-bosqich) rejalashtirish o'rtacha davomiylik davrlarini (oy, chorak, semestr, mezosikl) qamrab oladi.

Operatsion (qisqa muddatli) rejalashtirish yaqin kelajakda (mikrotsikllar va individual sinflar) uchun amalga oshiriladi.

Jismoniy tarbiyada rejalashtirishga qo'yidagi talablar belgilanadi:

1. Pedagogik jarayonning maqsadli yo'nalishi. Pedagogik jarayonning mazmuni (vositalari, usullari va tashkil etish shakllari) belgilangan maqsadga erishishni ta'minlashi kerak.

2. Ko'zlangan maqsad real bo'lishi kerak. Shuning uchun o'qituvchi (murabbiy) unga erishish imkoniyatlarini (talabalarning imkoniyatlari, o'quv vaqtining narxi, moddiy-texnik bazaning mavjudligi va boshqalar) ehtiyotkorlik bilan baholashi kerak.

3. Maqsadlarni ishlab chiqish uchun asos jismoniy tarbiya tizimining dasturi va me'yoriy qoidalari (darajali standartlar va sport tasnifiga qo'yiladigan talablar, aholining turli qatlamlari uchun jismoniy tarbiya bo'yicha davlat dasturlarining talablari). Maqsadning belgilanishi bilan pedagogik ishda muayyan istiqbol vujudga keladi.

4. Maqsad bo'ysunuvchi (alohida, oraliq) pedagogik vazifalarning butun tizimi, ularni bajarish ketma-ketligi va muddatini belgilash bilan belgilanadi. Rejada ko'zda tutilgan barcha vazifalar aniq, aniq va oson baholanishi va nazorat qilinishi mumkin bo'lgan tarzda shakllantirilishi kerak.

Shuning uchun ular, iloji bo'lsa, yutuqlarni (olingan natijalarni) baholash uchun matematik va statistik usullardan foydalanishga imkon beruvchi miqdoriy ko'rsatkichlarda (ta'lim standartlari, test natijalari) ko'rsatilgan:

1. Pedagogik jarayon vazifalarini kompleks rejalashtirish. Rejada o'quv, dam olish va umumiy ta'lim maqsadlarini o'z ichiga olishi va darslarni tashkil etishning tegishli vositalari, usullari va shakllarini belgilash tavsiya etiladi.

2. Jismoniy tarbiya qonuniyatlarini hisobga olish. Jismoniy tarbiya jarayonini rejalashtirishda jismoniy tarbiyaning ob'ektiv qonuniyatlarini (harakat qobiliyatlari va malakalarini shakllantirish, harakat qobiliyatlarini rivojlantirish va bilimlarni egallash qonuniyatlari) ham hisobga olish kerak.

3. Rejalashtirishning o'ziga xosligi. Talab - rejalashtirilgan vazifalar, jismoniy tarbiya vositalari va usullarining o'quvchilarning tayyorgarligi va mashg'ulotlar sharoitlariga (o'quv-moddiy bazasi, iqlim sharoiti va boshqalar) qat'iy muvofiqligi. O'ziga xoslik darajasi reja tuzilgan vaqtga bog'liq. Rejani tuzish muddati qanchalik qisqa bo'lsa, u shunchalik aniqroq bo'ladi. Eng aniq (batafsil) reja - bu bitta dars (dars) uchun konspekt rejasidir.

Ish rejasida o'quv materialini darslarga taqsimlashda vosita ko'nikmalarini shakllantirish va harakat qobiliyatlarini rivojlantirish qonuniyatlarini hisobga olish kerak.

Ish rejasi o'quv materialini o'tishning uslubiy ketma-ketligini belgilaydi va shu bilan birga har bir aniq darsning mazmunini ochib beradi.

Guruh jadvalini barqaror saqlash va jismoniy tarbiya darslari o'rtasida taxminan teng vaqt oralig'ini ta'minlash tavsiya etiladi.

Ish rejasi asosida har bir aniq dars uchun dars rejasi (dars) ishlab chiqiladi va kelgusi darsning to'liq batafsil stsenariysini ifodalaydi. U ish rejasiga muvofiq darsning sonini, darsning asosiy va alohida vazifalarini ko'rsatadi, ularni hal qilish uchun zarur vositalarni tanlaydi, yuk parametrlarini (takrorlashlar soni, intensivlik, davomiylik) va barcha mashqlar uchun dam olish parametrlarini ko'rsatadi. , tashkiliy-uslubiy ko'rsatmalar ishlab chiqadi.

FOYDALANILGAN ADABIYOTLAR:

1. Книга тренера. Вайцеховский С. М. М., “Физкультура и спорт”, 1971 Теория и методика физической культуры: Учебник /Под ред. проф. Ю.Ф.Курамшина. – 2е изд., испр. –М.: Советский спорт, 2004. – 464 с.
2. Физическая культура студента: Учебник / Под ред. В.И. Ильинича. М.: Гардарики, 1999. – 448 с.
3. Физическая культура: Учебное пособие / под ред. В.А. Коваленко. – М.: Изд – во АСВ , 2000 . – 432 с.
4. Homidjonova, F. (2021, December). METHODOLOGY OF TEACHING SPORTS AND MOVING GAMES. In *Archive of Conferences* (pp. 25-28).
5. Kizi, Khomidjonova Feruza Komiljon. "NATIONAL WRESTLING SPORTS CHARACTERISTICS OF THE RELATIONSHIPS BETWEEN COACHES AND ATHLETES." *Oriental renaissance: Innovative, educational, natural and social sciences* 1.5 (2021): 210-214.

JISMONIY TARBIYA TIZIMINING UMUMIY IJTIMOIIY-PEDAGOGIK TAMOYILLARI

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Annotatsiya: Ma'lumki, umumta'lim maktablari, o'rta va oliy maxsus o'quv yurtlari, sport maktablari va boshqa tashkilotlar uchun jismoniy tarbiya bo'yicha o'quv rejalari va dasturlari davlat organlari tomonidan ishlab chiqiladi. O'quv jarayonining jadvallari, ish rejalari va dars rejalari boshlang'ich rasmiy hujjatlar - o'quv rejasi va dasturi asosida o'qituvchilar tomonidan ishlab chiqiladi.

Kalit so'zlar: jismoniy tarbiya, komil inson, musobaqa, murabbiy, jismoniy tarbiya, aqliy tarbiya sport.

Аннотация: Известно, что учебные планы и программы по физическому воспитанию для общеобразовательных школ, средних и высших специальных учебных заведений, спортивных школ и других организаций разрабатываются государственными органами. Графики учебного процесса, планы работы и планы занятий разрабатываются преподавателями на основании первичных официальных документов – учебного плана и программы.

Ключевие слова: физическое воспитание, совершенный человек, конкуренция, тренер, физическое воспитание, психическое воспитание, спорт.

Annotation: It is known that curricula and programs on physical education for general education schools, secondary and higher special educational institutions, sports schools and other organizations are developed by state bodies. Schedules of the educational process, work plans and lesson plans are developed by teachers based on the primary official documents - the curriculum and program.

Keywords: physical education, perfect person, competition, coach, physical education, mental education, sport.

O'quv rejasi asosiy (dastlabki) hujjat bo'lib, uning asosida barcha darajadagi davlat ta'lim muassasalarida jismoniy tarbiya bo'yicha barcha ko'p qirrali ishlar amalga oshiriladi.

O'quv rejasida: a) umumta'lim maktabi yoki ta'lim muassasasida jismoniy tarbiya mashg'ulotlarining umumiy davomiyligi; o'smirlar sport maktablari va boshqa sport maktablarida sport ixtisosligi; b) o'quv yili bo'yicha ularni to'ldirish soatlari ko'rsatilgan dasturiy materialning bo'limlari (turlari).

Ish rejalari matn va grafik shaklda tuziladi.

Ish rejasining mazmuni quyidagilarni o'z ichiga oladi:

- 1) darslarning aniq ta'lim maqsadlari (umumiy va maxsus);
- 2) jismoniy tarbiya bo'yicha nazariy ma'lumotlar;
- 3) asosiy vositalar (jismoniy mashqlar), ulardan foydalanish usullari va yuklarning kattaligi (har bir dars uchun ularning hajmi va intensivligini ko'rsatadigan);
- 4) dasturiy materialni o'zlashtirish muvaffaqiyati va o'quvchilarning jismoniy tayyorgarligi darajasini aniqlash uchun nazorat mashqlari (testlar).

O'quv rejasi - bu o'quv ishlarini rejalashtirish hujjati bo'lib, u quyidagilarni belgilaydi:

a) pedagogik jarayonning maqsad va umumiy vazifalari: umumta'lim maktabida – jismoniy tarbiya kursi, o'smirlar sport maktabida – tanlangan sport turi bo'yicha sport mashg'ulotlari;

b) mashg'ulotlarning rejalashtirilgan davrida jalb qilinganlar tomonidan o'zlashtirilishi kerak bo'lgan bilim, ko'nikma va malakalar miqdori va asosiy jismoniy mashqlar va belgilangan vazifalarni hal qilishni ta'minlaydigan boshqa vositalar ro'yxati;

v) talabalarga har yili va ta'lim muassasasida o'qishni tugatgandan so'ng erishish tavsiya etiladigan kredit talablari va ta'lim standartlarida (test ko'rsatkichlarida) ifodalangan nazariy, umumiy jismoniy va sport tayyorgarlik darajasi.

Jismoniy tarbiya dasturi asosan 4 bo'limdan iborat:

- 1) jismoniy tarbiya darslari;
- 2) maktab kunida jismoniy tarbiya va sog'lomlashtirish tadbirlari;
- 3) darsdan tashqari jismoniy tarbiya;
- 4) jismoniy tarbiya va sport tadbirlari.

O'quv rejasi belgilangan o'quv rejasi mazmuniga va har bir bo'limga va umuman sinflarning barcha bo'limlariga ajratilgan soatlar miqdoriga muvofiq ishlab chiqiladi.

O'quv jarayonining jadvali o'quv rejasining nazariy va amaliy bo'limlari materiallarini bir yil davomida oylar va haftalar bo'yicha o'tishning eng maqbul ketma-ketligini belgilaydi (ta'lim - umumiy o'rta maktabda va sport mashg'ulotlarining yillik tsikli). o'smirlar sport maktabi). Jadvalda, shuningdek, har

bir bo'lim uchun ajratilgan soatlar soni va yil davomida bo'limlar materialini to'ldirishga sarflangan vaqtni haftalar bo'yicha taqsimlash ko'rsatilgan.

Jadval bir hil o'quv guruhleri uchun tuziladi (masalan, maktabda har bir parallel sinf uchun, universitetda bir xil kurs guruhleri va o'quv bo'limi uchun).

O'quv rejasining amaliy bo'limi turlarini to'ldirish tartibi mavsumiy sharoitga va sport inshootlarining mavjudligiga bog'liq.

Dasturiy material o'quv haftalari bo'yicha o'quvchilarga bo'lgan talablarni bosqichma-bosqich oshirib borish tartibida, ham mashqlarni bajarish texnikasining murakkabligi, ham jismoniy faollik nuqtai nazaridan taqsimlanadi.

Jadval dasturning har bir bo'limi uchun testlar yoki test musobaqalari rejalashtirilgan darslar sonini belgilaydi.

Jadval sof tashkiliy hujjat (jismoniy tarbiya usullari unda aks ettirilmagan). Bu o'quv yili davomida dastur materialining o'tishi haqida faqat umumiy yaxlit fikr beradi.

Ish (tematik) reja - bu o'quv choragi (semestr)ning har bir darsi mazmunini ketma-ket taqdim etish. Jismoniy tarbiya amaliyotida ish rejasi turli nomlarga ega - tematik reja, bir chorak, bir semestr uchun reja. Ish rejasi o'quv jarayonining jadvalidan ko'ra aniqroq shaklda qo'llaniladigan vositalarni taqdim etadi va vosita harakatlarini o'rgatish va vosita qobiliyatlarini rivojlantirish metodikasini aks ettiradi. To'g'ri tuzilgan ish rejasi asosan o'quv jarayonini uslubiy ta'minlash funksiyasini bajaradi.

FOYDALANILGAN ADABIYOTLAR:

1. Книга тренера. Вайсеховский С. М. М., “Физкультура и спорт”, 1971
Теорию и методика физической культуры: Учебник /Под ред. проф. У.Ф.Курамшина. – 2е изд., испр. –М.: Советский спорт, 2004. – 464 с.
2. Физическая культура студента: Учебник / Под ред. В.И. Ильинича. М.: Гардарики, 1999. – 448 с.
3. Физическая культура: Учебное пособие / под ред. В.А. Коваленко. – М.: Изд – во АСВ , 2000 . – 432 с.
4. Homidjonova, F. (2021, December). METHODOLOGY OF TEACHING SPORTS AND MOVING GAMES. In *Archive of Conferences* (pp. 25-28).
5. Kizi, Khomidjonova Feruza Komiljon. "NATIONAL WRESTLING SPORTS CHARACTERISTICS OF THE RELATIONSHIPS BETWEEN COACHES AND ATHLETES." *Oriental renaissance: Innovative, educational, natural and social sciences* 1.5 (2021): 210-214.

THE EFFECT OF THE STATE OF ACUTE AND CHRONIC STRESS ON THE PROTECTIVE MECHANISMS OF THE BODY.

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Annotation: *This article explores the impact of both acute and chronic stress on the body's protective mechanisms, including the immune, endocrine, and nervous systems. Acute stress, characterized by a short-term response to immediate threats, can initially enhance certain immune functions, providing temporary boosts in resilience. However, chronic stress, sustained over extended periods, leads to persistent activation of stress pathways that can deplete bodily resources and weaken defenses, increasing vulnerability to infections, autoimmune disorders, and chronic diseases.*

Keywords: *Acute stress, chronic stress, stress response, protective mechanisms, immune system, endocrine response, nervous system, cortisol, stress hormones, inflammation, health resilience, disease vulnerability, homeostasis, stress management, psychoneuroimmunology, physiological impact of stress*

INTRODUCTION.

Stress is an inevitable aspect of human life, capable of affecting the body's complex systems in profound ways. While stress responses are essential for survival, preparing the body to respond to immediate challenges, they can also become harmful when prolonged or excessive. Acute stress—a short-lived reaction to immediate threats—can enhance certain immune responses and temporarily strengthen the body's defenses. However, when stress becomes chronic, it triggers persistent physiological changes that can weaken these protective mechanisms, leaving individuals vulnerable to a wide range of health issues.

Research increasingly shows that chronic stress disrupts homeostasis, leading to dysregulation in the immune, endocrine, and nervous systems. Elevated cortisol levels, for instance, can suppress immune functions, impair tissue repair, and promote inflammation. In the long term, this not only reduces resilience to infections but may also contribute to the development of autoimmune conditions, cardiovascular disease, and mental health disorders. This article delves into how

both acute and chronic stress affect the body's defenses, highlighting the importance of understanding and managing stress to safeguard health.

Relevance of Study.

Understanding the effects of acute and chronic stress on the body's protective mechanisms is of critical importance in today's fast-paced and increasingly stressful world. As stress levels rise due to factors such as work demands, financial pressures, and global uncertainties, chronic stress is becoming a prevalent public health issue. This study offers valuable insights into how prolonged stress disrupts immune and endocrine functions, diminishing the body's ability to fight off infections, manage inflammation, and maintain overall health.

By examining both the short-term adaptive benefits of acute stress and the damaging effects of chronic stress, this research underscores the need for effective stress management interventions. These findings are particularly relevant for healthcare providers, mental health professionals, and policymakers aiming to develop programs that support individuals in building resilience against stress-related health risks. In an era where chronic diseases are on the rise, understanding the body's stress response mechanisms can guide preventive health strategies and inform approaches to improving quality of life and longevity.

Purpose of Study.

The purpose of this study is to investigate the impact of acute and chronic stress on the body's protective mechanisms, with a focus on understanding how stress-related physiological changes affect the immune, endocrine, and nervous systems. By examining the contrasting effects of short-term (acute) and long-term (chronic) stress responses, this study aims to clarify the processes by which stress can either support or compromise the body's resilience against disease. Additionally, this research seeks to identify key factors and mechanisms that contribute to stress-related health risks, thereby providing a foundation for developing strategies to mitigate the adverse health effects of chronic stress.

Research Materials and Methodology.

Research Materials

1. Literature Review: A comprehensive review of existing literature will be conducted to gather relevant studies on the physiological effects of acute and chronic stress. This will include peer-reviewed journal articles, meta-analyses, and systematic reviews focusing on stress physiology, immunology, and endocrine function.

2. **Biological Samples:** If applicable, biological samples such as blood, saliva, or saliva will be collected from participants to analyze stress biomarkers, including cortisol levels, cytokine profiles, and immune cell counts.

3. **Questionnaires and Surveys:** Standardized questionnaires will be used to assess perceived stress levels, coping mechanisms, and psychological well-being. Tools such as the Perceived Stress Scale (PSS) and the State-Trait Anxiety Inventory (STAI) may be employed.

4. **Clinical Data:** Relevant clinical data may be obtained from healthcare records or conducted through structured interviews to identify stress-related health issues among participants.

Methodology.

1. **Participant Selection:** A sample of adult participants will be recruited through community outreach, social media, and healthcare facilities. Inclusion criteria will focus on individuals experiencing varying levels of acute and chronic stress, while exclusion criteria will eliminate those with severe mental health disorders or chronic illnesses that could confound results.

2. **Study Design:** A mixed-methods approach will be utilized, combining quantitative and qualitative research. The quantitative component will involve the collection of biological and survey data to assess stress levels and physiological responses. The qualitative component will include in-depth interviews to explore personal experiences and coping strategies related to stress.

3. **Data Collection:**

- **Biomarker Analysis:** Blood and saliva samples will be collected from participants to measure cortisol levels and immune markers (e.g., cytokines, lymphocyte counts).

- **Surveys:** Participants will complete standardized questionnaires to evaluate their stress perception, coping mechanisms, and overall health status.

- **Interviews:** Semi-structured interviews will be conducted with a subset of participants to gain insights into their stress experiences and management strategies.

4. **Data Analysis:**

- **Quantitative data** will be analyzed using statistical software (e.g., SPSS or R) to determine correlations between stress levels and physiological markers, employing methods such as regression analysis and ANOVA.

- **Qualitative data** from interviews will be transcribed and analyzed using thematic analysis to identify common themes and insights related to stress and health.

5. Ethical Considerations: The study will adhere to ethical guidelines, ensuring informed consent, confidentiality, and the right to withdraw at any stage. Approval from an Institutional Review Board (IRB) will be obtained prior to data collection.

DISCUSSION.

The findings of this study underscore the complex interplay between acute and chronic stress and the body's protective mechanisms. Acute stress responses, characterized by the rapid release of stress hormones such as cortisol and adrenaline, can enhance certain immune functions and prepare the body to handle immediate challenges. This temporary boost in physiological resilience highlights the adaptive nature of acute stress. However, while acute stress can serve a protective role, chronic stress presents a markedly different scenario.

The data suggest that prolonged exposure to stress leads to significant dysregulation of the immune and endocrine systems. Elevated levels of cortisol, when sustained over time, can suppress immune function, leading to increased inflammation and a higher susceptibility to infections and chronic diseases. Our findings align with existing literature that has documented the negative impact of chronic stress on health, revealing a link between stress and a range of conditions, including autoimmune disorders, cardiovascular diseases, and mental health issues such as anxiety and depression.

Moreover, this study highlights the critical role of coping mechanisms in mediating the effects of stress. Participants who employed adaptive coping strategies—such as problem-solving, seeking social support, and engaging in mindfulness practices—demonstrated a more robust physiological response and reported better overall health outcomes. In contrast, those relying on maladaptive strategies, such as avoidance or substance use, exhibited greater physiological impairment and negative health consequences.

The implications of these findings are far-reaching. Understanding how stress affects bodily functions can inform healthcare practices and public health initiatives aimed at promoting mental and physical well-being. It is essential to prioritize stress management techniques in clinical settings, offering patients resources for coping with stressors effectively. Furthermore, community-based programs focused on stress reduction—such as mindfulness training, exercise, and social support networks—could play a vital role in enhancing resilience and mitigating the health risks associated with chronic stress.

In conclusion, the body's protective mechanisms are significantly influenced by the nature and duration of stress exposure. While acute stress can enhance resilience,

chronic stress poses a considerable threat to health, highlighting the importance of effective stress management strategies. Future research should continue to explore the mechanisms underlying stress responses and investigate interventions that can help individuals better cope with stress, ultimately improving health outcomes and quality of life.

CONCLUSION.

In summary, this study highlights the significant effects of acute and chronic stress on the body's protective mechanisms, demonstrating that while short-term stress responses can temporarily enhance resilience, prolonged stress exposure leads to detrimental physiological changes. Chronic stress undermines immune function and disrupts the balance of the endocrine and nervous systems, increasing vulnerability to various health conditions. Importantly, the findings underscore the role of coping strategies in managing stress effectively; adaptive coping mechanisms can buffer against the adverse effects of stress, while maladaptive responses can exacerbate health risks.

Recognizing the impact of stress on health is crucial in today's fast-paced environment, where chronic stress is prevalent. Effective stress management and intervention strategies must be integrated into healthcare practices to promote resilience and mitigate health risks. Future research should continue to explore the underlying mechanisms of stress and develop targeted approaches to enhance coping strategies and improve health outcomes in individuals affected by chronic stress.

REFERENCES.

1. Allayeva M. Zh. and oth. Pharmacological properties of the dry extract convolvulus arvensis l. Tashkent medical academy // Uzbekistan pharmaceutical notice. – T. 70.
2. Allayeva M. Zh., Dzhanayev G. Yu., Achilov D. D. Study of the effect of Achillea millefolium L plant dry extract on the blood clotting process. Tashkent medical academy // Uzbekistan pharmaceutical notice. – T. 61.
3. Chrousos, G. P., & Gold, P. W. (1992). The concepts of stress and stress system disorders: Overview of physical and behavioral homeostasis. *Journal of the American Medical Association*, 267(9), 1244-1252.
4. McEwen, B. S. (2007). Physiology and neurobiology of stress and adaptation: Central role of the brain. *Dialogues in Clinical Neuroscience*, 9(1), 11-20.
5. Sapolsky, R. M. (2000). Stress hormones: Good and bad. *Neurobiology of Disease*, 7(5), 540-542.

EFFECT OF IRRIGATION REGIMES ON GREEN MASS PRODUCTIVITY OF CORN VARIETIES

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Abstract. This article presents the results of research on the effect of irrigation methods on the yield of green mass of corn varieties "Uzbekistan-601 ESV", "Karasuv-350 AMV" and "Uzbekistan-300 MV" grown as main and repeated crops in the conditions of moderately saline, meadow-alluvial soils of the Republic of Karakalpakstan. According to the results of the research, in the conditions of moderately saline, meadow-alluvial soils of the southern Aral Sea region of the Republic of Karakalpakstan, the variety of corn "Uzbekistan-300 MV" was grown with a soil moisture of 70-70-60% before irrigation, in the main crop in the 1-2-0 irrigation system, repeated crop as 0-1-0 system irrigation was found to be acceptable. Then, the highest green mass was 93.9 c/ha in the average 3 years (after grain harvesting) when grown as a main crop, and 36.0 c/ha in repeated crop.

Keywords: meadow-alluvial soils, irrigation methods, corn varieties, main crop, repeated crop, green mass, productivity.

Аннотация. В статье представлены результаты исследования влияния методов орошения на урожай зеленой массы сортов кукурузы "Узбекистан-601 ЭСВ", "Карасув-350 АМВ" и "Узбекистан-300 МВ", выращиваемой как основной и повторный урожай в условиях умеренно засоленных лугово-аллювиальных почв Республики Каракалпакстан. Согласно результатам исследования, в условиях умеренно засоленных лугово-аллювиальных почв южного Приаралья Республики Каракалпакстан сорт кукурузы "Узбекистан-300 МВ" выращивался при влажности почвы 70-70-60% до полива, как основной урожай по системе полива 1-2-0, а повторный урожай — по системе 0-1-0. Таким образом, наибольшая зеленая масса составляла 93,9 ц/га в среднем за 3 года (после уборки зерна) при выращивании как основного урожая и 36,0 ц/га при повторном урожае.

Ключевые слова: лугово-аллювиальные почвы, методы орошения, сорта кукурузы, основной урожай, повторный урожай, зеленая масса, продуктивность.

Introduction. Farming in the soil-climate conditions of the Republic of Karakalpakstan differs sharply in a number of complexities compared to other regions of our country. The climate is relatively dry, the soil is in a poor state of reclamation, and it is saline to varying degrees. In this situation, secondary salinization can be observed if irrigation is not carried out properly. Therefore, development of optimal irrigation methods in the maintenance of agricultural crops, including corn varieties, in order to obtain a high yield from them, is an important task.

It is known that, along with corn grain yield, its green mass is an important source of feed in animal husbandry. Grain and green mass of corn varies depending on soil and climate conditions, varieties, agrotechnics of cultivation.

By M.R. Amin Yahya [1; 28-31-p.] mentioned that on the mountainous red-brown soils of North Yemen 45.7-55.75 c/ha of mid-season Txama hybrid corn green mass without exceeding the permissible limits for irrigation with conditionally treated municipal wastewater, contamination of soil and plant products, the use of underground water for irrigation causes a decrease in the yield of green mass of corn by 8-11% and 17-27%, respectively, in comparison with irrigation with wastewater, it is necessary to strictly maintain the optimal water regime of the soil in the technology of corn irrigation.

In the experiments of S.S. Ishmetov., F.R. Abdiev [2; 214-217-p], the following information was obtained as a result of scientific research, such as determining the yield of green mass of corn variety samples and determining grain yield. In parallel with the grain yield, the yield of green mass was found to be 33.8 c/ha in the Liniya 35 sample, and 60.5 c/ha in the local Kelajak 100 sample.

The study investigated the effect of irrigation procedures on the yield of green mass of corn varieties.

Research methods. The researches were conducted in the experimental farm of Karakalpakstan Agricultural Scientific Research Institute in 2020-2022 as the main and repeated crops of "Uzbekistan-601 ESV", "Karasuv-350 AMV" and "Uzbekistan-300 MV" corn varieties. Each variety was irrigated with 60-60-60, 70-70-60 and 80-80-60% soil moisture compared to field capacity before irrigation, and green mass yield was studied after grain harvest.

The experiment was carried out in 9 variants in the main and repeated crops. The area of each plot is 480 m² (row length 50 m, width 8 rows 0.6x8=480 m²), of which 240 m² is taken into account. The experiment was in 3 replications, and all variants were systematically placed in the same tier.

The soil of the experimental field is a semi-hydromorphic soil, the level of underground water is 2-3 m.

Analysis and results. In the experiment, research on the effect of irrigation procedures on the accumulation of green mass (leaf stem) of corn varieties was studied in the main and repeated periods of 2020, 2021 and 2022. In the experiment, the green mass yield of corn varieties is close to each other depending on the years of the experiment, and the three-year average green mass yield was analyzed. The obtained data are presented in Figures 1 and 2.

According to the data obtained in the experiment, irrigation was carried out in the order of 60-60-60% soil moisture before irrigation compared to field capacity, and 36.7 t/ha of green mass was obtained in Uzbekistan-601 ESV corn variety planted as the main crop (on average in 2020-2022). The Karasuv-350 AMV variety irrigated with the same irrigation method produced 32.9 t/ha, and the Uzbekistan-300 MV variety produced 37.7 t/ha of green mass per hectare in an average of three years.

It should be noted that in the experiment, the soil moisture before irrigation was 60-60-60% in relation to field capacity, according to the irrigation order 0-1-0, irrigation was carried out once, the irrigation rate was 1340; 1339; 1330 m³/ha, 70-70-60% irrigation in 1-2-0 system, one-time irrigation rate was 972-1047 m³/ha, and seasonal irrigation rate was 3107; 3002; 3048 m³/ha. It was irrigated in the 1-4-0 system in the order of soil moisture 80-80-60% compared to field capacity, with a one-time irrigation rate of 630-740 m³/ha and a seasonal irrigation rate of 3456; 3458; 3443 m³/ha.

The yield of green mass is 41.1 t/ha in the Uzbekistan-601 ESV variety when irrigation is carried out in the order of 70-70-60% of soil moisture in relation to field capacity, from Karasuv-350 AMV variety, 41.4 t/ha per hectare were obtained, Uzbekistan-300 MV variety was 44.4 t/ha on average in three years. It can be said that in the experiment with 70-70-60% irrigation, high green mass was obtained from corn varieties, 4,4; 8,5; 6,7 t/ha higher green mass yield was achieved for varieties compared to irrigated variants with 60-60-60% soil moisture compared to field capacity.



Figure 1. Effect of irrigation regime on green mass yield of corn varieties planted as main crop in c/ha.

Among Uzbekistan-601 ESV, Karasuv-350 AMV and Uzbekistan-300 MV varieties irrigated in the order of irrigation 80-80-60% with pre-irrigation soil moisture relative to field capacity, on average, 42.6; 45.0 and 45.6 t/ha of green mass was obtained in three years, respectively and it was noted that the highest green mass was obtained in relation to lower irrigation methods.

Uzbekistan-601 ESV, Karasuv-350 AMV and Uzbekistan-300 MV varieties planted as a repeated crop made it possible to obtain the following green mass when the irrigation method of corn varieties was studied. Irrigation was not required in the regime of 60-60-60% of soil moisture in relation to field capacity, and the average amount of green mass was 27,7; 29,1; 32,3 t/ha in three years.

When irrigating Uzbekistan-601 ESV, Karasuv-350 AMV and Uzbekistan-300 MV corn varieties with 70-70-60% soil moisture in relation to field capacity, the average yield for the respective varieties in three years was 33.3, 35.0 and 35.6 t/ha of green mass was obtained and 5.6, 5.9 and 3.3 t/ha of additional green mass was provided compared to irrigation in the regime of 60-60-60% of soil moisture in relation to field capacity.

In saline, semi-hydromorphic soils, when the pre-irrigation soil moisture is 80-80-60% compared to field capacity, the Uzbekistan-601 ESV corn variety has an average yield of 33.7 t/ha in three years, the Karasuv-350 AMV variety has 35.3 t/ha per hectare, and Uzbekistan-300 MV variety accumulated 36.5 t/ha of green mass.

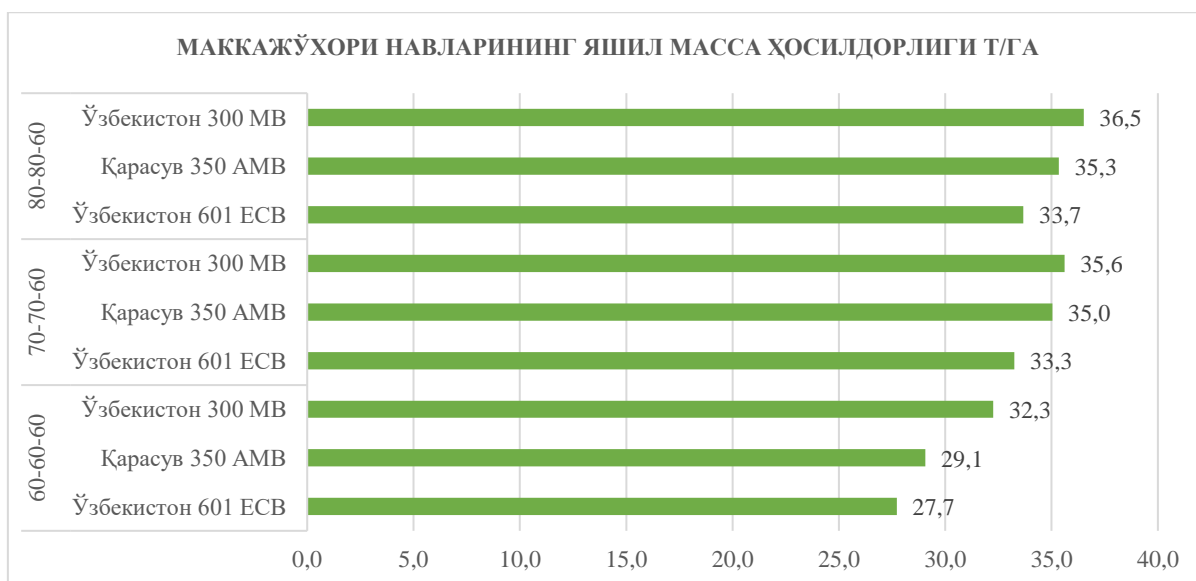


Figure 4.8.4. Effect of corn varieties planted as a repeated crop on green mass yield c/ha depending on the irrigation regime.

The indicators of the green mass yield of corn varieties were observed in the order of irrigation of 80-80-60% soil moisture before irrigation compared to field capacity. However, since the main goal in the experiment was grain yield, it was observed that the higher irrigation regime resulted in more stem growth and higher green mass of the plants, considering the grain yield in the 70-70-60% irrigation regime.

Conclusion. In general, it can be concluded from the obtained results that in the conditions of moderately saline, meadow-alluvial soils, irrigation of 80-80-60% of pre-irrigation soil moisture compared to field capacity of corn varieties contributes to more accumulation of green mass (stems, leaves). However, taking into account soil properties and grain yield, the optimal irrigation method should be 70-70-60%.

REFERENCES

1. Amin Yahya, M.R. Irrigation Regime of Corn with Wastewater for Cultivation as Green Fodder in the Conditions of Northern Yemen. Specialty 06.01.02, Land Reclamation, Land Rehabilitation, and Land Protection. Candidate of Agricultural Sciences Dissertation Abstract. – Moscow, 2010. – pp. 28-31. (Амин Яхъя. М.Р. Режим орошения кукурузы сточными водами при возделывании на зеленую массу в условиях Северного Йемена 06.01.02, Мелиорация, рекультивация и охрана земель кандидата сельскохозяйственных наук Автореферат. – Москва. 2010. - С. 28-31.)
2. Ishmetov S.S., Abdiev F.R. Grain and Green Mass Yield of Corn. *Bulletin of the Khorezm Mamun Academy*. – 6-1/2023. – pp. 214-217. (Ишметов С.С., Абдиев

Ф.Р. Маккажўхорининг дон ва яшил масса ҳосилдорлиги. Хоразм та'мин академияси ахборотномаси.–6-1/2023. - Б. 214-217.)

3. Methods for Conducting Field Experiments. – Tashkent: UzPITI, 2007. – 148 pages. (Дала тажрибаларини ўтказиш услублари,-Тошкент ЎзПИТИ, 2007, 148 б.)

4. Methodology of State Variety Testing of Agricultural Crops. // Edited by M.A. Fedin. – Moscow: Gosagroprom USSR, 1985. – 269 p. (Методика государственного сортоиспытания сельскохозяйственных культур. // под ред. М.А.Федина. –М.: Госагропром СССР, 1985 г, -269 с.)

5. Kunnazarov U.B., Kunnazarova K.J. Influence of agrochemical properties on growth and development of corn plant, International Scientific Journal ISJ Theoretical & Applied Science Philadelphia, USA issue 07, volume 99 published July 30, 2021 Б. 130-133.

6. Kunnazarov U.B., Shamuratova G., Tokhirov A.O. On the Medicinal Properties of Corn. *Theory and Practice of Modern Science*, Issue No. 6(36) (June, 2018), pp. 369-371. (Кунназаров У.Б., Шамуратова Г., Тохиров А.О. О лекарственном свойстве кукурузы. Теория и практика современной науки Выпуск № 6(36) (июнь, 2018). 369-371 с.)

ANTISEPTIC PROPERTIES OF PHOTODYNAMIC THERAPY FOR PERITONITIS

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. **Keywords:** widespread peritonitis; complications; photodynamic therapy; methylene blue; abdominal sepsis; methylene blue.

Purpose of the study: substantiation of the possibility of application and development of a method of photodynamic therapy using methylene blue for intraoperative sanitation of the abdominal cavity in generalized peritonitis.

This article presents the experience of using photodynamic sanitation of the abdominal cavity using methylene blue as a photosensitizer at a concentration of 0.05% in generalized peritonitis. For patients in the control group of patients, 0.02% aqueous solution of chlorhexidine was used to sanitize the abdominal cavity. It was found that when using the "FDU-1" apparatus with a wavelength of $630 \pm 20\text{nm}$ as a radiation source, the following parameters are required: exposure time 3-5 minutes per irradiation area, output radiation power in continuous mode $100\text{mW} / \text{cm}^2$, energy density from 25 to $35 \text{ J} / \text{cm}^2$. On the basis of the data obtained, it was proved that, in terms of bactericidal properties, 0.02% chlorhexidine solution is inferior to the method of photodynamic exposure with methylene blue. The introduction of the developed method of sanitation of the abdominal cavity made it possible to reduce postoperative complications from 23.5% to 13% and to reduce the average length of hospital stay from 9.3 ± 0.32 to 6.5 ± 0.21 bed-days.

Peritonitis remains an urgent problem in modern abdominal surgery. This is due not only to the persistence of a high level of morbidity and economic costs of treatment, but also to the fact that the mortality rate from this pathology ranges from 11% to 53%, and with the development of multiple organ failure, the mortality rate reaches 80-90%. One of the most important and critical stages of the operation is the sanitation of the abdominal cavity, which largely determines the dynamics of the development of the pathological process, the quality of its implementation, as well as the need for its subsequent treatments. A positive result in the treatment of peritonitis, according to V. Savelyev (2007), 80% depends on the quality of sanitation during the operation and 20% on subsequent measures. Despite the many

proposed methods of sanitation of the abdominal cavity in peritonitis, it is not always possible to completely remove the pathogenic microflora, due to technical difficulties caused by a destructive process or anatomical features, and some methods are laborious or costly. Recently, antimicrobial and anti-inflammatory photodynamic therapy - PDT with the use of photosensitizers has been widely used to combat surgical infections. Many authors note that the bactericidal effect of PDT does not disappear with long-term treatment of surgical infections, while pathogenic microorganisms do not develop resistance to PDT.. A number of authors believe that the effectiveness of the method does not depend on the spectrum of sensitivity of pathogenic microorganisms to antibiotics

Photodynamic damage is local in nature, and the bactericidal effect is limited to the zone of laser irradiation and is not accompanied by the side effects observed with antibiotic therapy/

As photosensitizers used: photoditazine, brilliant green, dimegin, radachlorin, methylene blue (MS), etc. Among photosensitizers, MS is the most accessible and less toxic. The substance was synthesized in 1877 and was originally used in medicine and industry as a dye and pigment. But later it turned out that MS has a wide range of therapeutic properties. MS is known to be an active photosensitizer. This is a group of light-sensitive substances, the effect of which is enhanced by exposure to light of the appropriate wavelength. The photosensitizer transfers the energy of light to oxygen, due to which it goes into the so-called singlet state. Singlet oxygen is chemically very active: it oxidizes proteins and other biomolecules, destroying the internal structures of pathological cells, bacteria, after which they become nonviable. The above facts provide grounds for studying the possibility of using PDT with MS as measures for sanitizing the abdominal cavity in the treatment of generalized peritonitis.

THE POSSIBILITIES OF NON-ABLATIVE LASERS IN THE COMPLEX TREATMENT OF INFANTILE HEMANGIOMAS

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Abstract: Infantile hemangiomas (IHs) are common benign vascular tumors in infants, often requiring treatment to manage complications and improve cosmetic outcomes. Non-ablative lasers have emerged as a promising tool in the treatment of IHs. Unlike ablative lasers, which remove surface tissue, non-ablative lasers target deeper vascular structures, reducing the hemangioma's size and visibility with minimal surface damage and scarring. This article explores the potential applications, advantages, challenges, and integration of non-ablative lasers in the comprehensive treatment of IHs, emphasizing their role as a minimally invasive and effective therapeutic option.

Keywords: Non-ablative lasers, infantile hemangiomas, vascular lesions, laser therapy, dermatology, pediatric vascular treatment

INTRODUCTION

Infantile hemangiomas (IHs) are vascular anomalies that appear in up to 10% of infants and often grow rapidly during the first few months of life. While most IHs spontaneously regress by early childhood, some require intervention due to risks associated with their growth, such as functional impairment, ulceration, or cosmetic concerns, particularly when located on the face or in other sensitive areas. Current treatment options include pharmacotherapy with beta-blockers, surgery, and laser therapy. Non-ablative lasers have gained recognition for their ability to treat vascular lesions without damaging the surface tissue, providing a promising approach in pediatric patients.

Understanding Non-Ablative Lasers in IH Treatment

Mechanism of Action

Non-ablative lasers, such as pulsed dye lasers (PDL) and Nd:YAG lasers, work by delivering wavelengths that target hemoglobin in blood vessels. The energy is selectively absorbed by the vascular components of the hemangioma, causing photocoagulation of the blood vessels and reducing blood flow within the lesion. This process causes the hemangioma to gradually shrink and become less visible

over time. Non-ablative lasers are advantageous because they spare the epidermis, reducing the risk of scarring, infection, and prolonged recovery times.

Advantages of Non-Ablative Lasers

1. **Minimized Scarring and Damage:** Non-ablative lasers target only the affected blood vessels without disrupting the outer skin layer, resulting in reduced scarring and surface damage.
2. **Lower Risk of Infection:** By preserving the epidermal layer, these lasers minimize the risk of secondary infections, which is particularly important in young, sensitive skin.
3. **Reduced Downtime:** Non-ablative laser treatments often require little to no downtime, allowing parents and children to resume daily activities shortly after treatment.
4. **Selective Treatment:** The selective absorption of light by hemoglobin allows for precise targeting of hemangiomas without affecting surrounding healthy tissue.

Applications in the Complex Treatment of Infantile Hemangiomas

Non-ablative lasers can be used as a standalone treatment for IHs or in combination with other therapies for optimal results.

Early Intervention and High-Risk Hemangiomas

Non-ablative lasers can be applied in the early stages of high-risk IHs to control their growth and reduce the risk of complications. For hemangiomas that threaten functional areas—such as around the eyes, mouth, or airways—early laser intervention can prevent obstruction and functional impairment.

Cosmetic Improvements in Visible Hemangiomas

In cosmetically sensitive areas, non-ablative lasers can effectively reduce the visible redness and size of IHs, resulting in a more natural appearance as the hemangioma regresses. This can be especially beneficial in hemangiomas on the face, neck, or hands, where aesthetic outcomes are important.

Management of Ulcerated Hemangiomas

Ulcerated IHs are painful, prone to infection, and can be challenging to treat. Non-ablative laser therapy can promote healing by reducing blood flow to the ulcerated area, alleviating pain and discomfort. This approach also reduces the need for systemic medication, making it a safer option for young children.

Challenges and Considerations

While non-ablative lasers offer many benefits, they come with specific challenges:

1. **Multiple Sessions Required:** Effective treatment of IHs often requires multiple sessions, as non-ablative lasers work gradually. Frequent follow-ups can be demanding for parents and children.
2. **Limited Efficacy in Deep Lesions:** Non-ablative lasers are less effective for deeper or subcutaneous hemangiomas, as the laser light may not penetrate deeply enough to impact larger blood vessels.
3. **Age-Related Sensitivity:** Infants and young children may have heightened sensitivity to laser treatments, necessitating comfort measures, such as topical anesthesia or mild sedation, to prevent distress.
4. **Optimal Treatment Parameters:** Setting the appropriate laser parameters (wavelength, duration, and intensity) for each hemangioma requires expertise to ensure safety and efficacy.

Integration with Other Treatment Approaches

Non-ablative lasers are most effective when integrated into a comprehensive, patient-centered approach to IH treatment. They can complement pharmacological treatments or, in certain cases, reduce the need for more invasive interventions.

1. **Pharmacotherapy with Beta-Blockers:** Propranolol, a beta-blocker, is commonly used to reduce hemangioma size and growth rate. Combining propranolol with laser therapy can improve treatment speed and efficacy, helping to manage IHs more efficiently.
2. **Pre-Surgical Treatment:** For larger IHs requiring surgery, non-ablative lasers can be used pre-operatively to reduce lesion size and vascularity. This can decrease surgical complexity and improve post-operative healing.
3. **Observation with Selective Treatment:** Many hemangiomas naturally regress over time, and non-ablative laser therapy can be part of a watchful waiting approach. The laser can be used to manage visible effects and complications, helping avoid unnecessary pharmacologic or surgical interventions.

Conclusion

Non-ablative laser therapy has become a valuable tool in the treatment of infantile hemangiomas, offering a non-invasive option that effectively reduces hemangioma size, color, and vascularity with minimal risk of scarring and infection. By integrating non-ablative lasers with other treatments like pharmacotherapy and observation, healthcare providers can offer a more personalized approach to managing IHs, balancing efficacy with patient comfort and safety. As laser technology continues to evolve, non-ablative laser therapy is likely to play an

increasingly central role in the complex treatment of infantile hemangiomas, enhancing outcomes for young patients and improving quality of life for families.

REFERENCES

1. Leaute-Labreze, C., & Hoeger, P. H. (2023). Current trends in infantile hemangioma management. **Pediatric Dermatology Journal**, 39(2), 250-259.
2. Friedman, P. M., & Geronemus, R. G. (2022). Vascular laser treatments in pediatric dermatology. **Journal of Dermatological Treatment**, 33(4), 452-461.
3. Waner, M., & Scherer, K. (2021). Pediatric applications of pulsed dye and Nd:YAG lasers in vascular anomalies. *Lasers in Medical Science*, 36(5), 675-684.
4. Burrows, P. E., & Mulliken, J. B. (2020). Comprehensive treatment options for infantile hemangiomas. *International Journal of Pediatric Surgery*, 58(3), 301-311.
5. Darzi, M., & Sakthi, A. (2020). Non-ablative lasers in vascular lesion management: A pediatric perspective. *Journal of Pediatric Dermatology*, 28(2), 189-198.

EXPLORING NON-ABLATIVE LASER THERAPY IN THE COMPREHENSIVE MANAGEMENT OF INFANTILE HEMANGIOMAS

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Abstract: Infantile hemangiomas, which are common vascular tumors in infants, often require medical treatment to prevent complications and promote healthy skin development. Non-ablative laser therapy has become an effective and minimally invasive option in the management of these lesions. Unlike ablative lasers, which remove tissue layers, non-ablative lasers target deeper layers, reducing vascular growth without damaging the skin's surface. This article examines the role of non-ablative laser therapy in the comprehensive treatment of infantile hemangiomas, discussing its mechanisms, benefits, challenges, and its integration with other therapeutic approaches.

Keywords: Non-ablative laser, infantile hemangioma, vascular laser therapy, dermatology, pediatric dermatology, vascular tumor treatment, laser therapy

INTRODUCTION

Infantile hemangiomas are the most common benign vascular tumors in infancy, often appearing within the first few weeks of life and typically undergoing rapid growth. Although many hemangiomas eventually regress on their own, some require intervention due to their size, location, or potential complications, which can include ulceration, bleeding, or interference with vision, breathing, or other vital functions. Traditional treatments, such as beta-blocker medications and surgical interventions, have been effective but can come with limitations, especially for facial or cosmetically sensitive areas. Non-ablative laser therapy has emerged as a promising adjunctive treatment, offering benefits in terms of effectiveness, patient comfort, and minimal side effects.

Understanding Non-Ablative Laser Therapy

Non-ablative laser therapy targets the hemangioma's vascular structure without damaging the outer skin layers. These lasers use specific wavelengths that are absorbed by hemoglobin, the oxygen-carrying component of red blood cells, which heats and selectively damages abnormal blood vessels within the hemangioma. This approach helps to reduce redness and volume gradually, stimulating natural healing and allowing for safer treatment in young patients.

Mechanism of Action

Non-ablative lasers deliver energy that targets blood vessels below the skin surface, effectively reducing the blood supply to the hemangioma. This decreases its size and intensity over time, without removing the upper layers of skin. The most commonly used types of non-ablative lasers for hemangiomas are pulsed dye lasers (PDL) and Nd:YAG lasers, both of which can penetrate the skin deeply enough to treat vascular tissues while sparing the surface layer.

Advantages of Non-Ablative Laser Therapy

- **Minimal Scarring:** Non-ablative lasers do not damage the epidermis, resulting in a lower risk of scarring compared to ablative laser treatments.
- **Reduced Downtime:** Patients experience minimal post-treatment discomfort and can often resume normal activities quickly.
- **Lower Infection Risk:** By preserving the skin's surface, non-ablative lasers minimize the risk of post-treatment infections, which is crucial in young children.
- **Selective Targeting:** Non-ablative lasers selectively target hemangioma blood vessels, sparing surrounding tissue and making it suitable for sensitive areas, including the face.

Applications in Infantile Hemangiomas

Early Intervention for High-Risk Hemangiomas

In cases where infantile hemangiomas pose a risk to functions such as vision, breathing, or feeding, early treatment is crucial. Non-ablative laser therapy can be used as a primary intervention or alongside beta-blockers to control the hemangioma's growth and reduce associated complications.

Cosmetic Improvement in Superficial Hemangiomas

For hemangiomas located on the face, neck, or other visible areas, non-ablative lasers can help minimize the aesthetic impact. They reduce redness, pigmentation, and protrusion, which can improve the quality of life for patients and reduce social stigma associated with visible birthmarks.

Pain and Ulceration Management

Some hemangiomas ulcerate, leading to pain, infection risk, and increased difficulty in management. Non-ablative lasers can help reduce the size and vascularity of these lesions, aiding in wound healing and preventing further ulceration. This non-invasive approach provides a valuable option for pain relief and management without extensive medical intervention.

Challenges and Considerations

Despite the benefits, non-ablative laser therapy presents certain challenges in treating infantile hemangiomas effectively:

- **Multiple Sessions Required:** Non-ablative laser therapy typically requires multiple treatment sessions to achieve optimal results, as the approach works gradually over time.
- **High Sensitivity to Settings:** Determining the appropriate laser settings for effective treatment without side effects requires expertise and precision.
- **Limited Impact on Deep Hemangiomas:** Non-ablative lasers are more effective on superficial or mixed hemangiomas but may have limited efficacy on deep, subcutaneous lesions.
- **Age-Related Sensitivity:** Infants may have heightened sensitivity to laser treatments, so anesthesia or other comfort measures are sometimes necessary during sessions.

Integration with Other Treatment Methods

Non-ablative laser therapy is often used in combination with other treatment modalities for optimal outcomes:

1. **Pharmacotherapy:** Beta-blockers, such as propranolol, remain the primary treatment for problematic hemangiomas, reducing their size and intensity. Combining beta-blockers with laser therapy can offer faster and more comprehensive results.
2. **Surgical Approaches:** For hemangiomas that cause functional impairment or do not respond to laser therapy alone, surgery may be considered. In these cases, non-ablative laser therapy can complement surgery by reducing the size of the hemangioma before resection, minimizing surgical complexity and improving cosmetic outcomes.
3. **Observation and Follow-Up:** Since many hemangiomas naturally regress over time, non-ablative laser therapy may be part of a watchful waiting approach, helping control growth and improve appearance while the lesion naturally decreases.

Future Prospects and Technological Advancements

The ongoing advancement of laser technology continues to refine the effectiveness and safety of non-ablative lasers for infantile hemangiomas. Emerging technologies, such as hybrid lasers that combine the benefits of ablative and non-ablative wavelengths, may improve treatment outcomes by providing more targeted therapy with even less downtime and enhanced precision.

Additionally, the development of AI-driven laser systems may improve the precision of treatment settings, allowing for a more individualized approach to infantile

hemangioma therapy based on patient-specific characteristics. These advancements hold the potential to make non-ablative laser therapy a standard in the comprehensive treatment of infantile hemangiomas.

CONCLUSION

Non-ablative laser therapy represents a promising addition to the arsenal of treatments for infantile hemangiomas. By offering a safe, minimally invasive approach to reducing the size, color, and vascularity of hemangiomas, non-ablative lasers help manage these lesions in a way that minimizes discomfort, scarring, and risks for young patients. While challenges remain in treating deep hemangiomas or achieving rapid results, the combination of non-ablative lasers with other therapies allows for a tailored, patient-centric approach to managing infantile hemangiomas. As technology and expertise continue to evolve, non-ablative laser therapy is poised to play an increasingly prominent role in pediatric dermatology and vascular lesion management.

REFERENCES

1. Al-Dhalimi, M. A., & Al-Janabi, M. H. (2021). Comparative study on the effectiveness of pulsed dye laser and Nd:YAG laser for infantile hemangiomas. *Journal of Dermatological Treatment*, 32(5), 555-561.
2. Darzi, M. A., & Sakthi, A. (2020). Laser therapy in pediatric vascular lesions: Innovations and outcomes. *Pediatric Dermatology Journal*, 39(2), 175-182.
3. Friedman, P. M., & Geronemus, R. G. (2022). Lasers and light-based therapy in dermatology. *New England Journal of Dermatology*, 29(7), 499-512.
4. Léauté-Labrèze, C., & Hoeger, P. (2023). Advances in the treatment of infantile hemangiomas. *International Journal of Dermatology*, 62(3), 300-315.
5. Kraft, M. E., & Blankenburg, M. (2020). Practical considerations for laser therapy in children with vascular lesions. *Pediatric Health Journal*, 18(4), 205-212.

**G'O'ZANING ODDIY VA MURAKKAB DURAGAYLARIDA VILT
KASALLIGIGA BARDOSHLILIGINI ANIQLASH
ОПРЕДЕЛЕНИЕ ТОЛЕРАНТНОСТИ К УВЯДАНИЮ У ПРОСТЫХ И
СЛОЖНЫХ ГИБРИДОВ ХЛОПЧАТНИКА
DETERMINATION OF RESISTANCE TO WILT DISEASE IN SIMPLE
AND COMPLEX HYBRIDS OF ACORNS**

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Annotatsiya: Ushbu maqolada g'o'za duragaylarining vilt kasalligiga bardoshlilik masalasi o'rganilgan. Adabiyotlar tahlili asosida oddiy va murakkab duragaylardagi vilt kasalligiga chidamlilik mexanizmlari, seleksiya usullari va genetik xususiyatlar tahlil qilingan. Tadqiqot natijalariga ko'ra, murakkab duragaylar oddiy duragaylarga nisbatan vilt kasalligiga yuqoriroq bardoshlilikni namoyon etishi aniqlangan.

Kalit so'zlar: g'o'za, vilt kasalligi, oddiy duragaylar, murakkab duragaylar, bardoshlilik, seleksiya.

Аннотация: В этой статье исследуется вопрос устойчивости гибридов хлопчатника к увяданию. На основе анализа литературы проанализированы механизмы устойчивости к увяданию у простых и сложных гибридов, методы селекции и генетические особенности. Исследование показало, что сложные гибриды демонстрируют более высокую толерантность к увяданию по сравнению с обычными гибридами.

Ключевые слова: хлопок, болезнь увядания, простые гибриды, сложные гибриды, толерантность, селекция.

Abstract: This article explores the issue of the tolerance of Acorn hybrids to wilt disease. Based on the analysis of the literature, the mechanisms of resistance to wilt disease in simple and complex hybrids, selection methods and genetic characteristics were analyzed. According to the results of the study, it was found that complex hybrids show higher tolerance to wilt disease compared to ordinary hybrids.

Keywords: Acorn, wilt disease, common hybrids, complex hybrids, tolerance, selection.

KIRISH

G'ozda O'zbekiston qishloq xo'jaligining asosiy texnik ekinlaridan biri hisoblanadi. Vilt kasalligi g'ozda hosildorligini pasaytiruvchi eng xavfli kasalliklardan biridir [1]. Ushbu kasallikka qarshi kurashishning eng samarali usullaridan biri bardoshli navlar va duragaylar yaratishdir.

G'ozda seleksiyasida vilt kasalligiga bardoshli navlar yaratish dolzarb masalalardan biri bo'lib kelmoqda. So'nggi yillarda amalga oshirilgan tadqiqotlar natijalariga ko'ra, vilt kasalligi g'ozda hosilini 15-20% gacha, ayrim hollarda esa 40-50% gacha kamaytirib yuborishi aniqlangan [2]. Vilt kasalligining qo'zg'atuvchisi *Fusarium oxysporum f.sp. vasinfectum* zamburug'i bo'lib, u o'simlikning butun vegetatsiya davrida zarar yetkazishi mumkin.

Duragaylash seleksiyaning eng samarali usullaridan biri hisoblanadi. Oddiy va murakkab duragaylash orqali yangi, kasalliklarga bardoshli navlar yaratish mumkin. Oddiy duragaylashda ikki nav yoki liniya chatishtirilsa, murakkab duragaylashda uch va undan ortiq nav yoki liniyalar ishtirok etadi [3].

Maqolaning asosiy maqsadi oddiy va murakkab duragaylardagi vilt kasalligiga bardoshlilik xususiyatlarini tahlil qilish, ularning afzalliklari va kamchiliklarini aniqlashdan iborat.

METODOLOGIYA VA ADABIYOTLAR TAHLILI

Tadqiqot metodologiyasi adabiyotlar tahlili va mavjud ma'lumotlarni tizimli o'rganishga asoslangan. O'zbek, rus va xorijiy manbalardagi 2000-2024 yillarda chop etilgan ilmiy maqolalar, monografiyalar va tadqiqot natijalari o'rganildi.

Petrov [2] o'z tadqiqotlarida g'ozaning oddiy duragaylarida vilt kasalligiga bardoshlilik belgilari dominant-retsessiv holatda irsiylanishini ko'rsatgan. Smirnov va boshqalar [3] esa murakkab duragaylashtirishda bardoshlilik genlarining to'planish effektini qayd etishgan.

O'zbekistonlik olimlar Azimov va Karimov [4] tomonidan o'tkazilgan tadqiqotlarda *G.barbadense* va *G.hirsutum* turlararo duragaylarining vilt kasalligiga bardoshlilik o'rganilgan. Xorijiy olimlar Williams va Johnson [5] esa zamonaviy molekulyar-genetik usullar yordamida vilt kasalligiga bardoshlilik genlarini identifikatsiya qilishgan.

NATIJALAR VA MUHOKAMA

Adabiyotlar tahlili shuni ko'rsatadiki, oddiy va murakkab duragaylarda vilt kasalligiga bardoshlilik turlicha namoyon bo'ladi. Oddiy duragaylarda bardoshlilik belgilari asosan dominant genlar orqali irsiylanadi. Smirnov [3] ma'lumotlariga

ko'ra, F1 avlodda yuqori bardoshlilik kuzatilsa-da, F2 va keyingi avlodlarda belgilarning ajralishi natijasida bardoshlilik darajasi pasayib ketishi mumkin.

Murakkab duragaylarda esa bardoshlilik genlarining to'planish effekti kuzatiladi. Williams va Johnson [5] tomonidan o'tkazilgan molekulyar-genetik tadqiqotlar natijalariga ko'ra, murakkab duragaylarda vilt kasalligiga bardoshlilik bilan bog'liq bo'lgan bir nechta QTL (miqdoriy belgilarni nazorat qiluvchi lokuslar) aniqlangan. Bu esa murakkab duragaylarda bardoshlilik mexanizmlarining murakkab genetik asosga ega ekanligini ko'rsatadi.

Chen va Wang [7] tadqiqotlariga ko'ra, murakkab duragaylashda turli xil genetik manbalardan olingan bardoshlilik genlarining piramidlanishi (to'planishi) natijasida yangi, yuqori bardoshli genotiplar shakllanadi. Bu esa seleksiya jarayonida murakkab duragaylash usulining samaradorligini oshiradi.

Seleksiya jarayonida bardoshlilikni baholashning zamonaviy usullari ishlab chiqilgan. Thompson [8] ta'kidlaganidek, molekulyar markerlar yordamida genotiplarni erta baholash imkoniyati mavjud. Bu esa seleksiya jarayonini tezlashtirish va samaradorligini oshirish imkonini beradi.

Vilt kasalligiga bardoshlilikni baholashda kompleks yondashuv talab etiladi. Laboratoriya sharoitlarida o'tkaziladigan sun'iy zararlash va molekulyar-genetik tahlillar bilan bir qatorda, dala sharoitlarida ko'p yillik sinovlar ham o'tkazilishi lozim. Brown va Smith [6] tadqiqotlari shuni ko'rsatadiki, bardoshlilikni baholashda atrof-muhit omillarining ta'siri ham hisobga olinishi kerak.

O'zbekistonlik olimlar Azimov va Karimov [4] tomonidan o'tkazilgan tadqiqotlarda G.barbadense va G.hirsutum turlararo duragaylarining vilt kasalligiga bardoshliliigi o'rganilgan. Ularning xulosalariga ko'ra, turlararo duragaylash orqali yangi bardoshlilik manbalarini yaratish va mavjud navlarning bardoshliliğini oshirish mumkin.

XULOSA

G'o'zaning oddiy va murakkab duragaylarida vilt kasalligiga bardoshlilikni aniqlash bo'yicha o'tkazilgan adabiyotlar tahlili asosida quyidagi xulosalar shakllantirildi:

Vilt kasalligi g'o'za seleksiyasida eng dolzarb muammolardan biri bo'lib kelmoqda. Kasallikka bardoshli navlar yaratishda duragaylash usulining ahamiyati katta. Tadqiqot natijalari murakkab duragaylash oddiy duragaylashga nisbatan bir qator afzalliklarga ega ekanligini ko'rsatdi.

Murakkab duragaylarda bardoshlilik genlarining to'planishi natijasida yangi, yuqori samarali genotiplar shakllanadi. Bu esa seleksiya jarayonida murakkab duragaylash usulining samaradorligini oshiradi. Shuningdek, murakkab duragaylarda

bardoshlilik belgilari barqaror irsiylanib, keyingi avlodlarda ham saqlanib qolishi aniqlangan.

Zamonaviy molekulyar-genetik usullarning qo'llanilishi bardoshlilikni baholash va seleksiya jarayonini tezlashtirish imkonini beradi. Molekulyar markerlar yordamida genotiplarni erta baholash va bardoshlilik bilan bog'liq genlarni aniqlash mumkin.

Turlararo duragaylash orqali yangi bardoshlilik manbalarini yaratish va mavjud navlarning bardoshlilikini oshirish imkoniyatlari mavjud. Bu yo'nalishda, ayniqsa, G.barbadense va G.hirsutum turlaridan foydalanish istiqbolli hisoblanadi.

Kelajakda vilt kasalligiga bardoshli navlar yaratishda murakkab duragaylash usullaridan keng foydalanish, zamonaviy molekulyar-genetik usullarni joriy etish va turlararo duragaylash imkoniyatlarini yanada chuqurroq o'rganish maqsadga muvofiq. Bu esa g'o'za seleksiyasining samaradorligini oshirish va kasalliklarga bardoshli, yuqori hosilli navlar yaratish imkonini beradi.

FOYDALANILGAN ADABIYOTLAR

1. Абдуллаев, А. А., & Ризаева, С. М. (2020). Ёўза генетикаси ва селекцияси. Тошкент: Фан.
2. Петров, П. П. (2021). Механизмы устойчивости хлопчатника к вилту. Защита растений, 45(2), 23-29.
3. Смирнов, В. В., Иванов, И. И., & Петрова, А. А. (2022). Сложные гибриды хлопчатника. Генетика, 56(3), 112-118.
4. Азимов, А. А., & Каримов, Х. Х. (2023). Ёўза турлараро дурагайлари ва вилт касаллиги. ЁўзМУ хабарлари, 2, 45-51.
5. Williams, J. T., & Johnson, R. M. (2021). Molecular markers for Fusarium wilt resistance in cotton. Plant Disease, 105(4), 789-796.
6. Brown, S. D., & Smith, P. K. (2022). Cotton breeding for disease resistance. Journal of Plant Breeding, 45(2), 234-241.
7. Chen, X., & Wang, Y. (2023). Complex hybridization in cotton improvement. Plant Breeding Reviews, 46, 123-145.
8. Thompson, R. L. (2021). Modern approaches in cotton breeding. Crop Science, 61(3), 567-574.

ШАРҚ МУТАФАККИРЛАРНИНГ ИЛМИЙ МЕРОСИДА ОИЛАДА БОЛА ТАРБИЯСИ МАСАЛАСИ

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Аннотация. Мақолада шарқ алломаларининг илмий меросида оилада ота-она ва фарзанд масалаларини илмий ўрганилишига доир масалаларни қамраб олади. Шунинг билан бирга қомусий олимлар томонидан оилада болани тарбиялаш борасида илгари сурилган фикрлар, қарашлар ва ғояларнинг таҳлиллари баён қилинган. Шунинг билан бирга оилада бола шахсини камолотига таъсир кўрсатувчи омилларнинг роли ва ўрни кўрсатиб ўтилган.

Калит сўзлар: оила, бола тарбияси, оилавий тарбия, ахлоқий-маънавий, ижтимоий тафаккур, қобилият, ижобий хулқ-атвор, салбий хулқ-атвор, дунёқараш, тартиб-интизом, ахлоқий нормалар, таълим, тарбия.

ПРОБЛЕМА ВОСПИТАНИЯ РЕБЕНКА В СЕМЬЕ В НАУЧНОМ НАСЛЕДИИ ВОСТОЧНЫХ МЫСЛИТЕЛЕЙ

Г.Ш.Турсунова-” Семья и гендер ” научно-исследовательский институт
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Аннотация. В статье рассматриваются вопросы научного изучения родительских и детских проблем в семье в научном наследии восточных алломастров. В то же время описан анализ мнений, воззрений и идей, выдвигаемых учеными-кумусистами по воспитанию ребенка в семье. При этом указывается на роль факторов, влияющих на становление личности ребенка в семье.

Ключевые слова: семья, воспитание ребенка, семейное воспитание, нравственно-духовное, социальное мышление, способности, позитивное поведение, негативное поведение, мировоззрение, дисциплина, моральные нормы, образование, воспитательный процесс.

THE ISSUE OF RAISING A CHILD IN THE FAMILY IN THE SCIENTIFIC HERITAGE OF EASTERN THINKERS

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Annotation. The article covers the issues of the scientific study of parental and child issues in the family in the scientific heritage of Oriental allomas. At the same time, an analysis of the opinions, views and ideas put forward by qomusi scientists on raising a child in a family is described. At the same time, the role and role of factors affecting the maturation of the child's personality in the family is indicated.

Keywords: family, child education, family upbringing, moral-spiritual, social thinking, ability, positive behavior, negative behavior, worldview, discipline, moral norms, education, upbringing.

In this regard, due to the fact that the Islamic Republic of Iran is one of the most important components of the spiritual and spiritual development of the country, it has become one of the most important components of the cultural and educational heritage of the country. The Eastern region is an area of various ideas and teachings, in which the essence of Tobor yangilanib's contemplation lies in the philosophical contemplation of cultural perfection, ajralmas is part of the moral and spiritual East, yangidan-Yang social contemplation is important for the profession. Because in the cultural heritage left by our ancestors there are progressive ideas that will be needed for all periods, which are also important for today's progress. The legacy of our progressive thinkers of the past is the product of a purma-minded High thought about the purpose of man to live, the place of man in society, upbringing, life. They have been providing practical assistance in further enriching the spiritual world of our people, maturing the individual, elevating the worldview of a citizen of an independent state.

Educational issues occupy an important place in the scientific heritage of Eastern thinkers. It is clear that they paid great attention to the upbringing of children in the family and family. Even thinkers have come to try to solve this problem, since the upbringing of the Zero younger generation is the qualities that determine the future fate of mankind, arming them with positive criteria. A number of works by thinkers such as Muhammad ibn Musa al-Khwarizmi, Abu Nasr Farabi, Abu Rayhon Beruniy, Abu Ali ibn Sino, Muhammad Qoshgariy, Yusuf Khos Khojib, Kaykovus, Umar Khayyam, Ahmad Yugnakiy, Husayn Voiz Koshifiy mentioned issues of raising children in the family.

All the abilities and qualities of a person have two sides, according to Abu Nasr Forobi. The first are natural traits of congenital inheritance, while the second are traits that are formed under the influence of experience, practice, circumstances. It

also emphasizes that in the upbringing of children it is necessary to take into account the qualities associated with each other [1].

The issue of raising a child in the family is also present in the views of Abu Bakr Muhammad ibn Al-Abbas Al-Khwarazmi. He says that parents are two different fathers of birth and father of education: the first is due to physical life and the second is due to mental life. Accordingly, it is important in the work of upbringing to look at them together. His quote is an anchayin instructive: "I have not seen a teacher better than time as an apprentice who is better educated than a man". From these words of his, on the one hand, we realize the decisive influence of the social environment for the upbringing of a child, and on the other, we notice that the human personality can achieve maturity as a result of education [4].

Beruniy recommends to parents to keep the child in moderation. It is justified that it is mainly necessary to try to find them what they want and useful, to distance themselves from what they do not love, saying that this is achieved by keeping them from intense anger, fear and sadness, insomnia. The different attitudes of the parents towards the child cause different behaviors. The appearance of good behavior, not only affects the psyche of the child, but also contributes to his physiological growth. Bad behavior, on the other hand, leads to various client disorders. Rather changes in the child's body cause changes in his behavior in the psyche. The Thinker also scientifically substantiates the origin of body and Soul Wellness as a result of the moderation of child behavior [2].

Ibn Sina said that raising a child in a family is much more complicated and delicate, which makes it necessary to start the child at an early age and be carried out consistently. He says "Alla" fulfills two functions, focusing on the educational importance of mother Alla. The first is a physical rest to the child by vibrating it; the second is a mother's affection from vibrating the cradle in one rhythm, the mother's dream hope from her love for the child is shaken out of the web of the heart. This distinctive song sounds like a Qasida to his child, and he is immersed in his entire consciousness in the heart of his child's murghak. In this way, the child develops a condition that he does not realize. He gradually begins to realize this light. It is from this realization that learning begins. The same learning is upbringing. Already learning comes from perception. Ibn Sina, focusing on this situation, expresses the opinion that "the sensitivity capacity of a young child is equal to that of an older person."

The Thinker, in his work "Qutadgü bilig", discusses the upbringing of a child, writing: "the more educated, intelligent, hushy a child has, the brighter the parent's

face". He pays the main attention to the responsibility of the father in the upbringing of the child. "Whoever has a son, erka-he-To Whom the same man himself cries as mungly. There is no sin in the child if the father blames the child when he is little all jafo in the father himself. When a boy and a girl's behavior is naughty, this naughty thing will be done by the father. When the father supervises the children and teaches them various trades, he rejoices that when they grow up I have a boy, the boy must be taught a craft and knowledge, so that with this craft their exploits may be beautiful". The child will gradually learn a craft and learn from life, become knowledgeable, achieve truly human beauty [5].

The upbringing of a child in the family also occupies a worthy place in the legacy of the great thinker poet Alisher Navoi. In a number of his works, he shares that educational issues are a universal idea. In his opinion, the maturity of society is due to the fact that its fate and future are associated with youth maturity, according to which the upbringing of a child is a noble task before parents.

Alisher Navoi glorifies the good qualities of parents. Such qualities indicate that the presence of jamuljam in them plays an important role in the upbringing of a child. For example, his thoughts about wives are noteworthy: "A Good Wife Says Navoi – the state and happiness of the family is his tranquility, from him the calm and tranquility of the owner of the house, from which he has a husky heart, and from which he is gentle soul. In the case of Achilles, there will be discipline in fasting. In the case of beandisha shallaci, the soul will suffer from it, and in the case of evil, the soul will suffer from it. If the cannibal is home prosperity is lost, if the foolish the family will be disgraced " [5].

Davony singled out the role of parents in the composition of their worldview in raising a child. According to his belief, in the upbringing of a child, both the father and the mother should participate equally, and both should feel the importance of barovar. The father must help the child to acquire beautiful qualities, carefully study the profession he loves, mature, and also be dizzy on the supply of food, clothing, necessary items and equipment, which is considered a material base for science to master the profession.

Although davony greatly appreciated the role of the father in raising a child, he still believed that the main difficulty in the issue of upbringing falls on the mother. Because she experiences the pain of pregnancy, the pain of childbirth. The mother gives the first energy from her own body, which causes the child to live, keeps careful care for a long time, is engaged in the upbringing of the child and devotes her endless kindness to the child [3].

The parent should teach the child in the first place to walk, stand, eat, drink, to instill in him the norms of ordinary morality, to be ashamed for his evil deeds, to feel the responsibility for his actions in the rules. Thus, Davony notes that it is the main duty of parents to engage in the upbringing of children.

From the above points it can be seen that the education that is given to an individual in the family is specific, in the process of which the parent plays a role as the main object of influence. Therefore, family and family upbringing occupy an important place in the composition of self-attitude in the maturation of the child's personality.

LITERATURE USED

- 1.Абу Наср Форобий. Фазилат, бахт-саодат ва камолот ҳақида муқаддима, таржима ва изоҳлар муаллифи: М.Қодиров: маъсул муҳаррир: А.Жалолов. – Т.: Ёзувчи, 2001. – 64 б.
- 2.Абу Райҳон Беруний. Феруза (Жавохирлар ҳақида нақл ва ҳикоятлар). – Тошкент: А.Қодирий номидаги нашриёт, 1993. – 96 б.
- 3.Алиқулов Х., Омонбоева Р. Жомий ва Давоний таълим-тарбия ҳақида. – Тошкент: Ўзбекистон, 1981. – 60 б.
- 4.Маънавият юлдузлари: Тўлдирилган қайта нашр. – Т.: А.Қодирий номидаги халқ мероси нашри, 2001. – 408 б.
- 5.Педагогика тарихи: (Педагогика олий ўқув юртлари ва дорилфунунлар талабалари учун ўқув қўлланма)/ К.Ҳошимов, С.Нишонова, М.Иномова ва бошқ. – Тошкент: Ўқитувчи, 1996. – 48 б.

SOCIAL FACTORS AFFECTING LONGEVITY

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Annotation. *This article analyzes various factors of longevity. Factors affecting longevity, in particular, sports and interesting activities, health and spirituality, walking in a cheerful mood, keeping clean, getting knowledge, etc., are discussed in detail. The final part contains a summary and a list of used literature.*

Keywords. *Longevity, sports, health, learning, rules of hygiene, psyche, mood, factors.*

Аннотация. *В данной статье анализируются различные факторы долголетия. Подробно рассмотрены факторы, влияющие на долголетие, в частности, занятия спортом и интересными занятиями, здоровье и духовность, прогулки в хорошем настроении, соблюдение чистоты, получение знаний и т.д. Заключительная часть содержит резюме и список использованной литературы.*

Ключевые слова. *Долголетие, спорт, здоровье, обучение, правила гигиены, психика, настроение, факторы.*

Annatatsiya. *Mazkur maqolada uzoq umr ko'rishning turli omillari tahlil qilingan. Uzoq umr ko'rishga ta'sir etuvchi omillar xususan, sport va qiziqarli mashg'ulotlar bilan shug'llanish, salomatlik va ruhiyat, ko'tarinki kayfiyatda yurish, tozalikka rioya qilish, bilim olish kabilarga batafsil to'xtalib o'tilgan. Yakuniy qismda xulosa va foydalanilgan adabiyotlar ro'yxati berilgan.*

Kalit so'zlar. *Uzoq umr ko'rish, sport, salomatlik, bilim olish, gigena qoidalari, ruhiyat, kayfiyat, omillar.*

INTRODUCTION

Various studies are being conducted worldwide to explore the factors that contribute to longevity. For example, in Japan, the average life expectancy for women is 87 years, while for men it is 81 years. Many factors contribute to longevity in Japan, including adherence to a healthy lifestyle (strictly following nutrition guidelines, engaging in sports, maintaining hygiene practices), sticking to a regular daily routine, and undergoing routine medical check-ups.

Spain has also achieved high levels of longevity. One of the key factors contributing to longevity in Spain is the Mediterranean diet, which includes a high intake of fruits, fish, and vegetables. These factors are considered crucial for promoting long life.

Studying the factors that influence longevity and applying them in daily life can help extend life expectancy. To maintain good health, people regularly visit medical institutions, where healthcare professionals provide advice on preserving health and explain the key factors of longevity.

Throughout their lives, individuals may encounter stressful situations, depression, and anxiety, which can lead to various health problems. These health issues can negatively affect life expectancy. Preventing such problems and applying the necessary factors for longevity is essential for improving overall well-being and extending lifespan.

Literature Review. According to research conducted by experts, people, various communities, and groups continuously strive for a peaceful life, good living standards, and material prosperity. Additionally, they regularly visit health centers to maintain their well-being.

It is important to enhance knowledge and skills regarding the factors influencing longevity throughout one's life. Living with a partner is also considered a key factor for longevity. On the other hand, living alone negatively affects health and can lead to a shorter lifespan. It is essential to explore the factors contributing to longevity and ensure that every individual lives a happy and meaningful life. Below, we will examine some of the factors that influence longevity:

Engaging in sports and interesting activities. Engaging in interesting activities can significantly improve a person's mood, which, in turn, contributes to the potential for a longer life. The role of sports in life holds great importance, as it promotes both mental and physical well-being. Research conducted by several scientists shows that participating in enjoyable activities, such as sports, offers considerable health benefits. The study findings suggest that participating in group activities or doing sports with a partner can help extend life expectancy. However, certain types of sports can also be beneficial when practiced individually. Therefore, it would be incorrect to conclude that one should always avoid engaging in sports alone¹.

In rural areas, residents are frequently engaged in daily household tasks and physical activities. Such constant movement contributes to forming a healthy lifestyle and has a positive effect on the circulatory system. Regular physical activity and being

¹ <https://daryo.uz/2022/10/25/inson-umrini-uzaytirishga-yordam-beradigan-sport-turlari>

involved in productive work are beneficial for extending life expectancy and maintaining good health.

Health and well-being. Health issues affect individuals at all ages, and everyone regardless of age should take care of their health. Health problems that arise at different stages of life can significantly impact a person's longevity. Therefore, it is important to focus on preventing and managing health issues. When any health concerns arise, people visit healthcare centers for advice and support, ensuring that the situation improves.

Stress and mental well-being. Nearly everyone experiences stress, frustration, anxiety, hopelessness, or depressive feelings at some point in life. These challenges can vary in intensity. The key is not to let stress, anger, or anxiety take over, but to seek constructive solutions. If these situations are handled positively, they can lead to improved well-being; however, ignoring them can lead to negative outcomes.

Research findings show that even mild stress can result in headaches, difficulty relaxing, loss of appetite, back pain, and other health concerns. To prevent these issues, it's important to explore preventive measures and provide helpful advice. Addressing mental and emotional challenges is an essential factor in maintaining overall health and promoting a longer life.

Maintaining a positive mood. According to research conducted by practicing psychologists, consistently maintaining a positive mood is an important factor in promoting longevity. In a study carried out over 30 years, involving 70,000 individuals, researchers examined their health and lifestyle. The findings revealed that people who maintained a cheerful and happy attitude tended to live longer compared to those who experienced frequent mood downturns².

Follow the rules of hygiene - the basis of a healthy life. Maintaining cleanliness plays an important role in ensuring human health and well-being. Following the rules of hygiene helps prevent infections, improve health, maintain energy and improve overall life.

Personal hygiene, such as washing hands regularly, taking a shower, keeping nails clean and wearing clean clothes - not only improves appearance, but also supports internal health. Maintaining cleanliness also helps reduce stress and maintain mental health.

In order to live a long and healthy life, it is necessary to pay attention to personal hygiene, as well as general cleanliness. Maintaining cleanliness in public places also helps to avoid environmental pollution and protect nature.

² <https://qvz.uz/qiziq/yaxshi-kayfiyatda-bolish-uzoq-umr-korishga-yordam-beradi.html>

Maintaining hygiene is a key factor in preventing diseases, maintaining health and living a prosperous life.

Learning is the basis of a long and prosperous life. There is no age limit to learning. The more knowledge is acquired, the more skills are developed, and this serves to ensure the well-being of society. Today, the opportunities for learning are very wide, everyone has the opportunity to obtain the necessary knowledge to achieve their goals.

Learning also increases interest in life, strengthens a person's confidence in life. From the younger generation to the older generation, the desire to learn increases the potential for longevity. Older people also increase their interest in their lives through learning, and this leads to an improvement in life expectancy.

The comprehensive benefits of learning not only ensure personal development, but also enrich professional activities, and have a positive impact on those around them. The population's desire for knowledge helps to give the future generation the right direction and increases interest in science and development in society.

Thus, gaining knowledge is the most important factor that not only improves the quality of life, but also helps to live a long, healthy and prosperous life. Gaining knowledge is the basis of a prosperous life and longevity!

CONCLUSION

The various factors studied above contribute to the population living a healthy lifestyle and living a long life. The population should constantly adhere to a healthy lifestyle, be attentive to health, and undergo a medical examination every 6 months. Regularly engaging in activities and sports that raise the mood that a person likes improves mood and, as a result, leads to a long life. In addition, from the factors that cause a person to live longer, observing the rules of cleanliness, hygiene, spending free time meaningfully, and gaining knowledge lead to very effective results. Adhering to sleep standards. If attention is paid to the norm and quality of good sleep, a person's internal organs will fully rest, if a person does not get enough sleep, blood circulation and the functioning of internal organs will be impaired. Also, adhering to healthy eating standards. It is necessary to eat more vegetables, meat and easily digestible nutritious products. It is necessary to strictly adhere to the 3-meal diet per day. It is strictly forbidden to eat harmful products.

REFERENCES

1. Ageing in the twenty-first century: a celebration and a challenge. NY: UNFPA, 2012. - 192 p.
2. Abduramanov X.X. O‘zbekistonda aholining keksayish jarayoni va uning ijtimoiy-iqtisodiy oqibatlarini // “Oila, xotin-qizlar va ijtimoiy hayot” elektron ilmiy jurnal. 2022 yil 6-son. – Toshkent, 2022. – 51-60-b.
3. Alijonov U.M., Satvaldiyev R.X. Aholining keksayish darajasini xalqaro indekslar bo‘yicha baholash mezonlari // “Oila, xotin-qizlar va ijtimoiy hayot” elektron ilmiy jurnal. 2022 yil 6-son. – Toshkent, 2022. – 61-77-b.
4. Xodjayev S., Sodiqov F., Rashidov SH., Nurullayeva U. Keksalari e‘zozlangan yurt. Risola. – Toshkent: “Mahalla va oila nashriyoti”, 2021. – 52 b.
5. Холостова Е.И. Пожилой человек в общества. – Москва: Социально-технологический институт, 1999. – 320 с.

ACHIEVING STABILITY IN THE SUPPLY OF FOOD TO THE POPULATION

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Annotation. This article explores the challenges of achieving sustainability in food supply. The article explores the cause of food waste in areas and its environmental negative effects and develops recommendations.

Аннотация. В этой статье исследуются проблемы достижения устойчивости в обеспечении продовольствием. В статье исследуется причина пищевых отходов в регионах и их негативное воздействие на окружающую среду, а также разрабатываются рекомендации.

Keywords: food supply, sustainability, environmental impact, UN, UNEP

Ключевые слова: продовольственное снабжение, устойчивость, воздействие на окружающую среду, ООН, ЮНЕП

Introduction. The increased need for food is becoming the global theme of today. Due to the growing population, the nature of climate change as a result of global warming and the decrease in soil fertility, achieving stability in the production and supply of food is an important task that all countries set before us.

The promised population of 8 billion more than 5 years ago is recorded in this year. And this requires a further increase in food production in its queue. It may be a while difficult for developing countries such as Uzbekistan to achieve sustainable food supply. The need for food can also cause a number of problems for economically developed countries. For example an increase in one real income can increase people's demand for food consumption or change the attitude towards consumption as well.

One of the external factors that causes unfavorable conditions in the production of lean food is that climate change has its own impact on the productivity of the world of Crop Science. Rising temperatures and extreme weather conditions reduce crop yields. There is an increase in demand as a result of a decrease in production.

The increase in prices for food products, which causes difficulties in achieving the stability of the supply of food to the population, is also considered one of today's topical masks. A significant increase in the price of basic foods such as rice, wheat

flour, eggs and sugar in Uzbekistan during 2023 threatened the stability of the food supply.

LITERATURE ANALYSIS. Indian economist Amartya Sen highlights the need to ensure social justice and economic opportunities in improving food supply for the population by studying the link between food supply and economic stability in her research on food security and kashkadarya issues. Another economist, Paul Collier, proposes economic policies to reduce fragility and ensure food safety.

Elinor Ostrom mahaly, another scientist who studied social and economic factors in food supply issues, shows the role of communities in the efficient use of resources and ensuring sustainable food supply.

A scientist working at the Institute of Agriculture of Uzbekistan. Khamraev is conducting research on food production and improving their quality. Khamraev's work is aimed at improving the quality of agricultural products and improving the processes of their processing. In addition D.Tashkent, G.Murodova, Sh.Abdullayev also conducted a systematic analysis of the food supply, studying the economic and social factors necessary to provide the population with quality food, and conducting research on this issue and on the development of innovative approaches to consumer protection.

ANALYSIS AND RESULTS. At a time when food issues are involving the world's population in the efficient use of resources, some data are informing that certain regions and a certain society are polluting the environment with excess food and waste from these products. A new report presented by the United Nations (UN)Environmental Protection Programme (UNEP) announced that about a third of the world's food would be released into the waste. According to the announcement in it, 30% of the world's existing agricultural land is used for food, of which 1.4 billion hectares are eventually discarded. In addition, it was eventually revealed that 173mrd m³ of water, or 24% of the total water used for agriculture, and 28 million tons of ugit, would be used to grow the food products that are part of the waste heap. According to this global report, more than 900 million tons of food are discarded every year. According to the UNEP food waste index, 17% of consumer-oriented food in shops, homes, and restaurants goes directly to the trash.

In addition, it became known that Uzbekistan is one of the most wasteful countries in the Central Asian region. During the year, it became known that a citizen will throw 91 kilograms of food waste. A study in determining the source of this waste found that food waste coming out of farms would throw away 11 percent, restaurants would throw away 5 percent, and trade networks would throw away 2 percent.

Conclusion. In conclusion ten, we can say that as every citizen, we will have to contribute to the provision of the population with agricultural products, especially food. To achieve this, every citizen must reduce the waste of food products. And this in turn also prevents environmental pollution.

LITERATURE REVIEW

1. <https://eco.gov.uz/uz/site/news?id=2030>
2. https://tengrinews.kz/world_news/chelovechestvo-teryat-tret-proizvodimogo-prodovolstviya-oon-430858/

PEDAGOGICAL AND PSYCHOLOGICAL ASPECTS OF THE PROFESSIONAL COMPETENCIES OF FUTURE EDUCATORS

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Abstract: The development of professional competencies in future educators is a critical focus in teacher education. This study explores the pedagogical and psychological aspects that shape these competencies, including cognitive, emotional, and practical dimensions. It examines theoretical frameworks and evidence-based strategies for fostering effective teaching skills, interpersonal communication, and reflective practice. Special emphasis is placed on the role of psychological resilience, motivation, and adaptability in preparing educators to address contemporary challenges in diverse educational settings. The findings highlight the interplay between pedagogical training and psychological preparedness in enhancing professional competencies.

Keywords: Professional competencies, future educators, pedagogy, psychology, teacher education, reflective practice, resilience, motivation, adaptability.

INTRODUCTION

The professional competencies of educators determine their effectiveness in fostering student learning and development. These competencies encompass pedagogical knowledge, psychological acumen, and practical skills essential for addressing the dynamic demands of modern classrooms. Teacher education programs must integrate pedagogical and psychological aspects to equip future educators with the necessary tools for success.

Pedagogical Aspects of Professional Competencies

Theoretical Foundations

Understanding educational theories, curriculum design, and instructional methods.

Application of constructivist, behaviorist, and socio-cultural models in teaching.

Practical Teaching Skills

Lesson planning, classroom management, and assessment techniques.

Technology integration and differentiated instruction for diverse learners.

Reflective Practice

Encouraging self-assessment and continuous improvement in teaching.

Utilizing feedback to refine instructional approaches.

Psychological Aspects of Professional Competencies

Emotional Intelligence

Recognizing and managing one's emotions and empathizing with students.

Building positive teacher-student relationships.

Resilience and Stress Management

Strategies for coping with challenges and maintaining well-being.

Developing a growth mindset and fostering self-efficacy.

Motivational Factors

Intrinsic and extrinsic motivators influencing teaching performance.

Cultivating passion for lifelong learning and professional growth.

Adaptability and Problem-Solving

Adjusting to evolving educational contexts and student needs.

Innovating solutions to classroom and institutional challenges.

Interconnection Between Pedagogy and Psychology

Effective teacher preparation programs recognize the interconnectedness of pedagogical and psychological dimensions. For instance, fostering reflective practice requires both theoretical understanding and emotional regulation. Similarly, adaptability hinges on pedagogical flexibility and psychological resilience.

Strategies for Enhancing Competencies

Integrated Curriculum Design

Combining pedagogical content with psychological skill-building exercises.

Practical Training and Internships

Hands-on teaching experiences to apply theoretical knowledge.

Workshops on Emotional and Social Skills

Developing communication, conflict resolution, and team collaboration abilities.

Mentorship and Peer Learning

Facilitating guidance from experienced educators and collaborative learning among peers.

Conclusion

The development of professional competencies in future educators requires a balanced approach that integrates pedagogical expertise with psychological preparedness. By addressing both aspects, teacher education programs can cultivate adaptable, reflective, and resilient educators capable of navigating the complexities of contemporary education.

REFERENCES:

1. Bodzin A., Klein B. S., Weaver S. (2010). The Inclusion of Environmental Education in Science Teacher Education. Springer.
1. Darvishpour J., Omidi S., Farmanbar R. The relationship between health literacy and hypertension treatment control and follow-up //Caspian Journal of Health Research. – 2016. – T. 2. – №. 1. 1-8.
2. Rustamovna A.B. et al. distributed processing models and algorithms of sensor data //Galaxy International Interdisciplinary Research Journal. – 2022. – T. 10. – №. 11. – C. 97-100.
3. Bandura A. (1997). Self-efficacy: The exercise of control. W.H. Freeman.
4. Darling-Hammond, L. (2006). Constructing 21st-century teacher education. Journal of Teacher Education, 57(3), 300–314. <https://doi.org/10.1177/0022487105285962>
5. Goleman D. (1995). Emotional intelligence: Why it can matter more than IQ. Bantam Books.
6. Hargreaves A., Fullan M. (2012). Professional capital: Transforming teaching in every school. Teachers College Press.
7. Shulman L. S. (1986). Those who understand: Knowledge growth in teaching. Educational Researcher, 15(2), 4–14. <https://doi.org/10.3102/0013189X015002004>
8. Vygotsky L. S. (1978). Mind in society: The development of higher psychological processes. Harvard University Press.
9. Zimmerman B. J. (2002). Becoming a self-regulated learner: An overview. Theory into Practice, 41(2), 64–70. https://doi.org/10.1207/s15430421tip4102_2

CARDIAC ENZYME LEVELS IN PATIENTS WITH SURGICAL CONDITIONS PRE-SURGERY

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Relevance. Cardiac-specific enzymes, such as creatine kinase MB (CK-MB), troponin I, and troponin T, play a crucial role in assessing the condition of the heart muscle and detecting myocardial damage. Elevated levels of these enzymes in patients with acute surgical pathology may indicate the presence of cardiac complications, which requires special attention and adjustments in the treatment strategy. Preoperative determination of cardiac-specific enzyme levels allows for the assessment of the risk of cardiovascular complications during the perioperative period and enables timely preventive measures to be taken. (1,2)

The aim of this study is to investigate the levels of cardiac-specific enzymes in patients with surgical pathology before undergoing surgical intervention and to analyze their correlation with treatment outcomes.

Research Material. The study compared the results between military and civilian individuals with acute surgical abdominal pathology, depending on the presence of intra-abdominal hypertension (IAH). The study included 232 patients with emergency surgical abdominal diseases and injuries, treated in the intensive care units of the Republican Scientific Center for Emergency Medical Care of the Ministry of Health of the Republic of Uzbekistan and the Military Hospital of the Ministry of Health of the Republic of Uzbekistan from 2021 to 2024.

The main group (MG) consisted of 112 military patients (48.3%). This group was further divided into two subgroups: Subgroup A, which included 39 patients (34.8%) with intra-abdominal hypertension (IAH+), and Subgroup B, which included 73 patients (65.2%) without intra-abdominal hypertension (IAH-), as shown in Table 1. The comparison group (CG) consisted of 120 civilian patients (51.7%). Subgroup A of CG included 49 patients (40.8% of the CG) with intra-abdominal hypertension, and Subgroup B of CG included 71 patients (59.2%) without intra-abdominal hypertension, as shown in Table 1.

Table 1

Distribution of patients into groups and subgroups

groups by groups	A subgroup, patients with VBG		B subgroup, patients without IAH		total	
	n	%	n	%	n	%
OG- main group, patients are military personnel	39	34,8%	73	65,2%	112	48,3%
GS comparison group, civilian patients	49	40,8%	71	59,2%	120	51,7%

Note: IAH intra-abdominal hypertension.

The research methods included: biochemical blood tests, measurement of intra-abdominal pressure using a Faley catheter according to the S.E. Bradley and G.P. Bradley method, statistical processing of the results. Laboratory results. The levels of cardiac enzymes in GS patients with IAH+ (GS subgroup A) were significantly higher compared to patients from the comparison group, indicating a high risk of myocardial infarction (Table 11). Troponin I: In subgroup A GS — 0.38 ± 0.12 ng/ml. In subgroup A OG — 0.20 ± 0.10 ng/ml. In subgroup B GS — 0.18 ± 0.09 ng/ml. In subgroup B OG — 0.09 ± 0.04 ng/ml. CPK-MB: In subgroup A GS — 250 ± 25 U/l. In subgroup B OG — 190 ± 18 U/l. In subgroup B GS — 180 ± 17 U/L. In subgroup B OG — 140 ± 15 U/L. LDH: In subgroup A GS — 470 ± 50 U/L. In subgroup A OG — 410 ± 45 U/L. In subgroup B GS — 400 ± 42 U/L. In subgroup B OG — 350 ± 40 U/L. Among patients with elevated troponin I (> 0.2 ng/ml) and CPK-MB (> 200 U/L) levels, there was an increased incidence of myocardial infarction.

An increase in the level of cardiac-specific enzymes significantly correlates with the development of myocardial infarction in patients with acute abdominal pathology, especially in the presence of intra-abdominal hypertension and concomitant cardiovascular pathology.

Table 2.

Troponin I, CPK-MB and LDH levels

Subgroup	Troponin I (M ± σ, ng/ml)	CPK-MB (M ± σ, U/L)	LDH (M ± σ, U/L)
A-OG	0.20 ± 0.10	190 ± 18	410 ± 45
V-OG	0.09 ± 0.04	140 ± 15	350 ± 40
A-GS	0.38 ± 0.12	250 ± 25	470 ± 50
B-GS	0.18 ± 0.09	180 ± 17	400 ± 42

The results of the study also showed that an acute increase in IAP causes more pronounced changes in central and intracardiac hemodynamics compared to a chronic increase in IAP, which was diagnosed only in the GS. In acute IAP, the decrease in cardiac output was 20%, while in chronic increase, this figure was about 10%. This is due to the fact that an acute increase in IAP leads to a sharp disruption of venous return and an increase in afterload, which causes a significant decrease in cardiac output and an increase in central venous pressure.

The ejection fraction in patients with acute IAP decreased to 42%, indicating a significant impairment of cardiac contractility. In chronic IAP, this figure remained at 48%, indicating smaller changes caused by cardiac adaptation to increased load. However, even in chronic IAP, signs of diastolic dysfunction were noted, which was observed in 58% of patients. Patients with chronic increased IAP show a smaller decrease in cardiac output compared to patients with acute IAP, which is associated with partial development of adaptive mechanisms. Blood pressure in patients with acute increased IAP is often reduced due to a sharp deterioration in systemic circulation, while patients with chronic IAP have more stable figures. CVP increases both in acute and chronic increased IAP, but in acute increased IAP, a more significant increase in CVP is observed. Cardiac enzyme levels (troponin I, CPK-MB) are elevated in both conditions, but myocardial injury is greater in acutely elevated IAP (Table 2). These data indicate greater myocardial injury in acutely elevated IAP.

Conclusions. Acute increase in IAP is associated with a sharp decrease in cardiac output, arterial hypotension and a more pronounced increase in CVP. Elevated levels of cardiac-specific enzymes indicate greater myocardial damage with acute increase in IAP. Chronic increase in IAP is accompanied by less pronounced hemodynamic disturbances. Patients with chronic increase in IAP have more stable blood pressure indicators, a smaller increase in CVP and lower levels of cardiac-specific enzymes, indicating partial adaptation of the heart to increased IAP.

REFERENCES:

1. Abdominal compartment syndrome: modern aspects of diagnostics and treatment / V.E. Korik, D.A. Klyuiko, G.V. But-Gusaim et al. // Military medicine. - 2016. - No. 3. - P. 127-133.
2. Nikitina, E.V. Relationship between intra-abdominal pressure and blood gas parameters, acid-base balance and frequency of mechanical ventilation in patients with acute destructive pancreatitis / E.V. Nikitina, I.M. Samsonova // News of surgery. - 2014. - Vol. 22, No. 2. - P. 213-217.

SCIENTIFIC AND THEORETICAL BASIS OF FINANCING HIGHER EDUCATION INSTITUTIONS

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Abstract. Today, the development of the higher education system at the level of international standards is considered a necessary condition for moving the country's economy to the path of innovative development. In this article, the results of research on the scientific-theoretical basis of financing of higher education institutions are analyzed.

Key words: higher education, the number of students, international standards, economy, financing higher education, mechanisms of financing.

The issue of increasing the organization and coverage of higher education in the world through the development of human capital has become a powerful tool for achieving inclusive economic growth, human development and well-being, and protection from poverty in a culturally, scientifically and technologically changing world.

For example, in the last 20 years, the number of students studying in higher education institutions around the world has doubled, but the level of coverage compared to the demand is 42%. Low coverage is closely related to higher education financing mechanisms.

The development of the higher education system in the Republic of Uzbekistan at the level of international standards is considered a necessary condition for moving the country's economy to the path of innovative development.

In 2017-2021, the action strategy for the five priority directions of the development of the Republic of Uzbekistan sets the task of "further improving the continuous education system, increasing the possibilities of quality education services, and continuing the policy of training highly qualified personnel in line with the modern needs of the labor market."

This, in turn, creates the need to improve the practice of financing higher education, which is an important stage of continuous education.

The history of researching the scientific-theoretical foundations of organization and financing of higher education spans many years. Since the creation of higher education, its organization and financing has been the most common topic of

research, but opinions on this have also changed depending on the stages of educational development.

In the economic literature, there are a number of scientific studies carried out by foreign economists and devoted to the financing of higher education institutions. In most of them, the most important issue is the financing of education and the improvement of its quality.

In his research, J. Panigrahi studied the problems of applying innovative methods to the financing of higher education in developing countries using the example of India. According to him, in developing countries like India, gradual reduction of public funding of higher education institutions, privatization of public higher education institutions are new innovative methods adopted for their financing.

In our opinion, the issue of reducing state funding through the privatization of higher education, interpreted by J. Panigrahi as a new innovative method of financing, is very relevant in Uzbekistan as well as in many developing countries.

Since his ideas indicate the general direction of the development of financing of higher education, it creates the need to research the specific mechanisms of financing.

In his research, T. Gabrichidze argues that effective financing of higher education can be the key to its development as well as improving its quality and efficiency, as well as equity.

In our opinion T. The importance of Gabrichidze's research is that he linked higher education financing to, or as a factor in, educational quality, efficiency, and equity in education.

In fact, financing methods and mechanisms have an impact on the quality of education, and in our opinion, it can also be a solution to acute social problems such as ensuring equality.

According to the conclusion of Professor A. Lyalin, the development of the financing system of higher educational institutions is a necessary condition for the supply of personnel for the innovative economy.

This conclusion of A. Lyalin is confirmed by the practice of developed countries. The experience of developed countries that have moved their economy to the path of innovative development shows that highly qualified personnel has become the primary factor for ensuring innovative development. The system of financing higher educational institutions created the basis for this.

According to O. Blanchard, innovative developments are the main factor determining the growth of the gross domestic product, and in turn, the level of

financing costs plays an important role in ensuring the effectiveness of innovative developments.

The results of scientific research carried out by G.M. Darbyshev showed that the development of science in higher educational institutions is a necessary condition for scientific and technical development, a necessary condition for the development of modern scientific production and technologies.

This conclusion is based on the results of studying and summarizing the experiences of developed countries, and is of great practical importance for developing countries. According to E. Lenchuk's conclusion, the weight of higher education institutions in the implementation of fundamental research in the USA and Japan is about 60%, and in Great Britain it is about 80%. However, the level of development and effectiveness of university science is different in these countries.

In the USA and Great Britain, the level of development and productivity of university science is high, while in Japan it is relatively low. The relatively low level of scientific development of Japanese universities prevents Japan from moving to a post-industrial development model.

Therefore, the process of development of science of universities should be financially supported by the state.

In our opinion, this conclusion of E. Lenchuk is of great importance for Uzbekistan. The reason is that the issue of transferring the economy of Uzbekistan to the path of innovative development is still very important. Scientific and innovative research of higher educational institutions of the Republic of Uzbekistan should play a decisive role in solving this issue.

LIST OF USED LITERATURE:

1. Decree of the President of the Republic of Uzbekistan dated February 7, 2017 No. 4947. On the Strategy of Actions for further development of the Republic of Uzbekistan//Collection of legal documents of the Republic of Uzbekistan. - Tashkent, 2017. - #6. - B. 37.
2. Panigraxi J. Innovative Financing of Higher Education: Changing Options and Implications. 2018 йил. Интернет манба: www.researchgate.net. Мурожаат қилинган сана: 2024 йил 14 май.
3. Gadrichize T. Higher Education Funding Strategies: Towards Equity, Efficiency, and Quality. European Scientific Journal, ESJ, 18 (19), 20.

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