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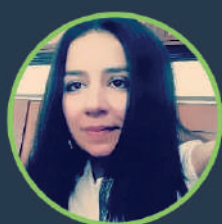
CUTTING-EDGE SCIENCE 2021

FEBRUARY 2021 SHAWNEE, USA



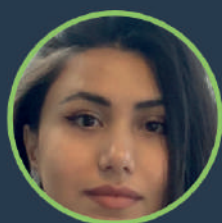
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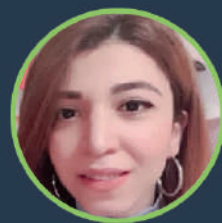
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PHD STUDENT

STUDENT- CENTERED TEACHING
MODEL IN AZERBAIJANI
EDUCATION SYSTEM



GUNEL ORUJOVA
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FROM THE POSSIBILITY OF
OVERCOMING THE NEGATIVE
EFFECTS OF DEMOGRAPHIC
FACTORS IN THE TRAINING
PROCESS.



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SOCIAL DEVELOPMENT ISSUES OF
ADOLESCENTS IN DIVORCED FAMILIES



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THE ROLE OF PESTICIDES IN
AGRICULTURE



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DETERMINATION OF PHENOL AND
PHENOLIC SAMPLES TAKEN FROM
THE CASPIAN



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ECONOMIC SCIENCES

CONSTRUCTION MATERIALS MARKET OF UZBEKISTAN CURRENT STATE AND PROSPECTS

Author: Norboboev Javokhir

Annotation: The article provides an initial analysis of the indicators for the entire period after the independence of Uzbekistan, and the dynamics of the main indicators in the construction industry in recent years, directions that are the pillars of the construction industry, such as the raw material base, human resources, are considered. In addition, the current level of compliance with environmental and safety standards in construction works has been studied.

Keywords: construction materials, construction markets, thermal insulation materials, agglomerite, glass raw materials, lime, natural facing stones, manufacture of pipe, sandy gravel, gypsum, anhydrite, localization program, environmental friendliness, fire resistance.

Since today Uzbekistan is one of the most intensively developing countries in the world, construction works in all cities of the republic reach a huge scale. From this fact, we can conclude that there is a huge demand for construction products of all types, and the investment potential of this industry is very huge. The development of the building materials industry is determined primarily by the measure of investment activity in the economy of the republic, the pace of industry reform, and changes in the structure of capital investments.

Uzbekistan is the largest country in Central Asia by population and the third in the CIS. And accordingly, the construction materials market of Uzbekistan is the largest among the countries of Central Asia, among the countries of the post-Soviet space, second only to the construction markets of Russia, Kazakhstan, and Ukraine. Throughout the country, since independence, there has been an increase in the number of funds allocated to this industry. The growth trend can be seen in the following table:

Constructional Works						
(billion sum)						
	1995	2000	2010	2015	2019	2020
Republic of Uzbekistan	342,4	388,4	8245,8	25423,1	71156,5	87823,8
Republic of Karakalpakstan	3315,4	21,8	237,1	1219,3	3315,4	3785,9
<i>regions:</i>						
Andijan	3539,1	23,5	345,3	1341,9	3539,1	4474,4
Bukhara	4368,1	30,8	580,0	2061,7	4368,1	5387,2
Jizzakh	2510,6	7,5	211,5	759,2	2510,6	2766,5
Kashkadarya	4365,3	34,8	699,2	2067,5	4365,3	4928,2
Navai	3464,0	17,3	418,9	1019,2	3464,0	4392,9
Namangan	3471,0	21,6	347,9	1010,4	3471,0	4491,8
Samarkand	4527,2	32,9	519,7	2010,6	4527,2	5665,9
Surkhandarya	3979,7	17,4	335,9	1351,3	3979,7	4690,6

Sirdarya	1926,2	9,2	134,9	478,9	1926,2	2192,1
Tashkent	5594,1	25,5	509,9	1562,0	5594,1	6930,6
Fergana	4162,8	30,0	489,2	1649,0	4162,8	5089,6
khorezm	2496,8	25,8	282,7	1174,7	2496,8	3032,0
Tashkent city	16256,9	82,3	1228,4	4113,0	16256,9	18758,9

As can be seen from the table, the main work is carried out in the capital of the country and in large cities. But at the same time, it should be taken into account that the construction materials industry of Uzbekistan is still lagging behind the demand in the market. In recent years, there has been a shortage in the market of basic building materials-cement and glass, which are imported in large quantities. This drawback shows how promising this market is for its participants. Nowadays, priority is given to building materials that are environmentally friendly and energy-efficient during production and operation. The use of thermal insulation materials has become a recent trend.

As for the positive aspects of the market and possible prospects, in order to eliminate the deficit and fully saturate the domestic market of building materials, a number of new construction projects are being implemented in the republic, as a result of which the commissioning of new capacities this year will amount to more than 3.1 million tons, and by the end of 2019 – more than 4.7 million tons.

By the beginning of 2022, the total capacity for the production of building materials, namely cement, will amount to more than 16 million tons.

The volume of construction works performed in January-August of the previous year amounted to 27 680.8 billion sums. The growth rate compared to the corresponding period of the year before last reached 104.4 %. The volume of construction work performed by large contractors amounted to 8112.5 billion sums, or 97.7% compared to the corresponding period last year, the share in the total volume of construction works reached 29.3 %. The volume of construction work carried out by small enterprises and micro-firms amounted to 11,649. 1 billion sums, or 42.1% of the total volume of construction works, the growth rate is 113.5 %. The informal sector accounted for 28.6 %, or \$ 7,919. 2 billion. sum, the growth rate of 99.0 %.

The main part of the construction work by type of economic activity was carried out through the construction of residential buildings and non-residential premises. Their share in the total volume of construction work was 77.2 % and, compared to the same period last year, increased by 0.3 percentage points. The share in the volume of construction works by type of economic activity, civil objects amounted to 11.3 % and, compared to the same period last year, it became equal. The share of specialized construction works amounted to 11.5 % and, compared to the same period last year, decreased by 0.3

The share in the volume of construction work by type of economic activity, construction of buildings and structures, performed by large contractors, amounted to 27.2% and, compared to the same period last year, increased by 0.2 percentage points. Accordingly, the share of small enterprises and micro-firms was 36.4 % (an increase of 1.9 percentage points), the share of the informal sector — 36.4 % (a decrease of 2.0% percentage points).

Currently, Uzbekistan has rich mineral resources for the development of the construction materials industry. In terms of raw materials for the production of building materials, Uzbekistan occupies a leading place among the republics of the Central Asian region. Mineral resources in the Republic noted many fields, including for the production of bricks and agglomerate on 339 fields of cementite – 49, sections of stone – 30, glass raw materials – 7, lime – 26, natural facing stones – 94, for the manufacture of pipe – 3, sandy gravel – 110, sand – 32, gypsum and anhydrite 25 fields, etc.

In the Republic as a result of modernization of existing facilities, construction of new enterprises, the production of modern and competitive construction materials the quantity exported from 2007 to the present time increased from 12 to 48 species, the volume of exports of products grew from \$ 33.9 million. Up to \$ 107 million. According to the localization program, about ten new types of products were produced in the amount of 45.9 billion sums. In addition, large-scale marketing work is being carried out to expand the export zone of products. Today, the geography of deliveries already covers such countries as Turkmenistan, Kazakhstan, Kyrgyzstan, Russia, Afghanistan, the United Arab Emirates, Iran, and other countries.

Currently, 30 enterprises of JSC “O’zqurilishmollari” have established an international quality management system ISO 9001-2000. In the near future, the number of such enterprises will be more

than 100 units. To increase the prestige of construction production enterprises, marketing research of building materials in domestic and foreign markets is carried out.

Thus, the construction sector in the republic becomes decisive in the development of the economy of Uzbekistan. This is logical and understandable – any enterprise, no matter what it does, must first build or reconstruct an existing structure for it. This should also include all infrastructure facilities, such as sewers, roads, and social enterprises.

Today, there are more than 24,100 operating enterprises in the construction industry of Uzbekistan, of which 3,800 were established this year.

Small construction companies and micro-firms performed 41.8% of construction and installation work from their total volume, and the growth rate was 108.3 %.

The construction of such complex and complex facilities as Tashkent city and Sky city, which are impossible to imagine without innovative technologies and materials, is particularly highlighted.

Modern construction is impossible without taking into account the requirements for the safety of the materials used, earthquake resistance, environmental friendliness, and fire resistance of the materials used. This dictates the use of special structures, innovative materials, and technologies.

For example, the managing partner of the international KNAUF group, Manfred Grundke, at a meeting with the Prime Minister of Uzbekistan, Abdulla Aripov, announced his readiness to develop modular construction technology in Uzbekistan, which provides for the construction of houses on the construction site from pre-prepared construction elements. The company's policy involves comprehensive solutions in the use of its materials in construction.

Innovative materials in construction must meet the most stringent requirements of strength, corrosion resistance, environmental and fire safety.

“The practice of fires has shown that hobbies with various externally attractive finishing materials that have not passed special certification are fraught with the risk of a light fire. This leads not only to greater material losses, but to more terrible consequences-people suffer, and often die. This is unacceptable. Therefore, the use of certified modern building materials for the interior and exterior decoration of buildings and structures that are resistant to fires is a categorical requirement for newly erected and reconstructed buildings. Fire safety should be taken into account at the design stage of the building,” says fire safety expert Alisher Eshonov.

Requirements for energy saving, economical operation of buildings and structures dictate the need to use materials that have good thermal insulation characteristics, and, at the same time, be also economically profitable in the medium and long term. This leads to the need to review outdated systems for heating buildings and supplying them with hot water.

“In the conditions of new construction and subject to the developed standards, regulations, with proper technical control, local boiler houses are more preferable. However, it is important to prepare a regulatory framework associated with the technical requirements of a local home, the financing of their construction, management of work and boiler maintenance, and Central dispatching system, including the emergency. In many developed countries, a combined approach to heat supply systems is used, which demonstrates an unambiguously positive economic effect” “ said Abduaziz Rakhimov, Head of Elite Polymer.

The use of innovative materials and technologies sharply raises the issue of training personnel at all levels-from construction workers to managers with a high level of knowledge and skill, able to work at a modern level.

Academician of the Academy of Sciences of Uzbekistan Risbai Juraev believes that if you stick to the old approaches, it turns out a paradoxical situation-while the student is being trained, both the materials and the equipment on which he studied become obsolete. And, having come to the working team, he is forced to retrain, and this is a loss in the pace of construction, and in its quality, which is economically unprofitable.

The Center for Secondary Special Education under the Ministry of Higher and Secondary Special Education is implementing reforms designed to solve these problems. For cooperation between colleges and enterprises, the Center establishes a mechanism of relationships with major international and local manufacturers of building materials and equipment that offer comprehensive solutions in construction. “The meaning of the reforms is to bring the study as close as possible to the place of future work of the student, to teach him to independently improve his skills, to instill the skills of independent updating of his knowledge” said Risbai Juraev.

Today, when a real “construction boom” has unfolded in the country, we can note not only the

economic component of the country's success but also such an important social aspect as the creation of jobs.

The draft resolution "On measures to regulate urbanization and improve the state housing policy", published for public discussion and providing for the creation of the National Agency for Urbanization and Social Development of the Republic of Uzbekistan, the announcement of an international competition for the development of Master Plans for the cities of Tashkent and Samarkand says that construction has become an industry that will always remain in the center of state attention.

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CHEMISTRY SCIENCES

PHYTOPLANKTON COMPOSITION AND SIZE-STRUCTURE FROM REMOTE SENSING DATA

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Key words: sea, plankton , data, HPLC, analysis.

Traditionally, remote sensing has been able to resolve successfully large and mesoscale phytoplankton distribution patterns. However, one of the present challenges of ocean color research is to obtain information on other descriptors of marine plankton such as its composition or its cell size. Phytoplankton Functional Types are conceptual groupings of phytoplankton species, which have an ecological functionality in common either in terms of the food web or biogeochemical cycles. The importance of PFT rely on their different functionality in the marine ecosystem. For instance, the presence of phytoplankton with calcite skeletons diminishes the surface ocean carbonate concentration, reduces sea water alkalinity with an acidification of the surface seawater and increases the release of CO₂ to the atmosphere. Siliceous phytoplankton is responsible of about 40% of the total marine PP. Both calciferous and siliceous shells cause phytoplankton to sink faster, contributing to the carbon export to deep sea. Nitrogen-phytoplankton fixers are important in the new production so they are able to dissolve nitrogen gas(N₂) into available nitrogen such as ammonium (NH₄⁺) and dissolved or particulate organic nitrogen. This producers generates this volatile organic compound that can escape into the atmosphere producing atmospheric sulphate aerosols that act as a nucleus for cloud condensation that can back-scatter the radiation from the sun and therefore cause a negative feedback on temperature by cooling the earth. Due to the natural variability of the optical properties of phytoplankton species, a method called PHYSAT has been developed that allows the identification of four different groups of phytoplankton. The method uses anomalies of radiation that leave normalized water measured by ocean color sensors at different wavelengths in the visible spectrum. Then relates this variability in the spectral signal to different optical properties This variability is used to identify four dominant phytoplankton groups in the PHYSAT classification: cyanobacteria such as Prochlorococcus, Synechococcus, nanoeukaryotes, and diatoms. One way to study the phytoplankton community from space is to evaluate the Phytoplankton Measurement Class (PSC). Most of these types of studies classify phytoplankton size groups into picoplankton (0.2-2 µm), nanoplankton (2-20 µm), and microplankton (20-200 µm). due to different physical and chemical niches, for example, the fact that microplankton cells sink faster than the surface layer and therefore more likely to carry organic carbon to deep, small cells. Just as phytoplankton size affects the export carbon flow in the global ocean, large cells predominate in phytoplankton populations that prefer small cells such as Prochlorococcus and Synechococcus in oligotrophic waters of the phytoplankton community. This is due to the high surface-volume ratio, which allows you to take foods that are highly effective in limited conditions. In addition, dominant picoplankton populations are closely linked to the microbial cycle, so most organic carbon is recycled by bacteria, which is efficient in exporting carbon to the lower ocean layers. Different methods are used to separate different PSCs from satellite data. For example, the spectral properties of the absorption spectrum can be used to obtain different PSC results (IOCCG, 2019). In general, larger phytoplankton classes are formed as the abundance increases, and phytoplankton causes an increase in cell size. Other methods classify phytoplankton into different size classes with high-performance liquid chromatography (HPLC) to identify pigment markers. Brewin et al. Developed a method for calculating the fractional contribution to the total Chl-concentration of

three phytoplankton size classes (micro, nano, and picoplankton) using multiple regression analysis between on-site and satellite data. However, phytoplankton composition analysis is still a major challenge, although progress is expected due to the activation of sensors with higher spectral, spatial, and radiometric resolutions.

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LITERATURE SCIENCES

INTERPRETATION AS A WAY OF UNDERSTANDING LITERARY TEXT

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Abstract: The approaches to the organization of the pupils' activity for the purpose of formation of the creative person through the work on interpretation of the art text are considered in this article.

Keywords: interpretation; formation; the creative person, language, research, philological;

A literary text is one of the most important types of artistic language communication. Turning to the interpretation of the text, we would like to simultaneously touch upon the issue of its perception and understanding, which in turn is also the subject of hermeneutics research.

From the point of view of philological hermeneutics, understanding is the process of comprehending the meaning (or meanings) of the text [1, p. 5]. This is a kind of dialogue between the speaker and the listener, the writer and the reader, in the process of which the activity of de-objectifying the meaning of the text is carried out, called textual activity [2, p. 78]. This dialogue can be regarded as a process of collision of the pictures of the world of the author and the interpreter, since the understanding of any work of art is conditioned by a complex of factors of a socio-psychological and cultural-linguistic nature, the context of the recipient's being.

Vasilyeva V.V. notes in this regard that for each reader there is only his known, only given to him and it is for him that the question arises [3, p. 21].

The perception of the facts of a foreign culture in the text is characterized by national-specific differences that exist between the native and foreign cultures. Here, the problem of understanding becomes most acute, since it is these differences that create certain difficulties in the process of perceiving a foreign language text, which can lead to an inadequate interpretation of a foreign culture.

According to the concept of Bakhtin M.M. understanding the text includes separate acts or levels, each of which performs its own function: the perception of the text; recognition of the text and understanding of its general meaning in a given language; understanding its meaning in the context of a given culture; active dialogical understanding of its meaning, coinciding with its formation [4, p. 361]. Based on this concept, understanding the text requires going beyond its literal reading and can be defined as interpretation, interpretation of the latter by correlating with other texts and cultural context.

Thus, in order to reveal the meaning and, therefore, understand the fictional text, it is necessary to interpret it accordingly. As shown by theoretical and practical analysis, the process of interpretation involves the following stages: guess, guess, hypothesis; conclusion of consequences and their comparison with known data; coordination of the first two stages, as a result of which the meaning of the text is comprehended. The interpretation of the text is a kind of interaction of two worlds: the inner world of a literary work and the world of the reader. Scientists note that in the process of interpretation, the recipient builds his own projection of the text, which, along with the image of an ideal literary text and mechanisms for comparing the ideal text with the proposed one, includes the mechanisms of axiological interpretation that allow the recipient to give one or another integral assessment of the text [5, p. 86] ... Due to the active role of the recipient, who brings his own ideas

about life and life values into an artistic text, it becomes possible for the existence of several different interpretations of one text, which is also explained by different levels of readiness for understanding and different characteristics of linguistic personalities. Based on the interpretation, we can assess the degree and depth of the recipient's understanding of the text

The currently existing methods of interpreting a literary text offer the reader a whole system of various techniques aimed at revealing the deep meaning of a literary work, comprehending its main idea and the author's intention. Within the framework of this article, we would like to turn to the existential interpretive method, which originates in one of the directions of modern philosophy, and considers human existence as an object of study. In this case, a literary work is considered as a segment of reality. It is the integrity that makes the origins and fundamental questions of human existence evident. The reader's ethical, religious, political and ideological ideas, whose subjective judgment is especially important in the existential method, is faced here with the questions and problems set forth in the text.

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MEDICAL SCIENCES

DETERMINATION OF TRACE ELEMENT COMPOSITION OF BLOOD IN PATIENTS WITH MYOPIA

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Abstract. This article provides data on the methods for determining and assessing the trace element status of blood in patients with myopic refraction of varying severity. The paper presents the results of examination of 140 (280 eyes) patients aged 18 to 45 years with various degrees of myopia in order to assess the role of the trace element composition of blood serum, as well as the content of 25 (HO) D in the development and progression of myopia by comparative study of the content of trace elements in serum and their excretion in patients with myopia and emmetropia.

Key words: myopia, microelemental composition, blood plasma

The urgency of the problem. Myopia is one of the most common eye diseases in the world. It is an eye condition in which parallel rays are focused in front of the retina rather than directly on its surface. The increasing prevalence of myopia is likely to lead to an increase in the development of potentially vision-threatening complications associated with myopia in the elderly [2, 4]. Myopia affects 1.6 billion people worldwide. Myopia is expected to continue to rise in the coming years, reaching 2.5 billion by 2020. Oxidative stress is one of the pathways for the development of myopia [1].

Axial myopia of a high degree is associated with numerous histological changes in the posterior pole of the eyeball [8]. Changes in scleral biomechanics during the development of myopia are associated with changes in matrix components, mainly with a reduced collagen content. The decrease in the accumulation of collagen in the sclera in myopic eyes is a result of both a decrease in collagen synthesis and accelerated collagen degradation. Numerous studies have shown that trace elements - zinc (Zn), copper (Cu), selenium (Se) and manganese (Mn) - play an important role in antioxidant processes [1, 3, 10] and in the biochemical restoration of the sclera. There are reports of disturbances in the metabolism of Zn, Cu, Se and Mn in myopia; however, there are very few publications devoted to the analysis of the content of trace elements in the blood serum of children with myopia, and the results of studies are sometimes contradictory [11, 9, 6].

The purpose of the study is to determine the role of the trace element composition of blood in the development and progression of myopia through a comparative study of the content of trace elements in the blood serum and their excretion in patients with myopia and emmetropia.

Materials and research methods. The paper presents the results of examination of 140 (280 eyes) patients aged 18 to 45 years with varying degrees of myopia, who were treated in the department of eye diseases of the clinic of the Andijan State Medical Institute. The average age was 25 ± 1.2 years. For comparison, a control group of 100 patients (200 eyes) with mild to moderate emmetropia and hyperopia was taken. Children with hyperopia or astigmatism, as well as patients suffering from other pathologies of the organ of vision of any genesis, were excluded from the study.

The generally accepted ophthalmological examination in all patients included both standard techniques and special apparatus research methods. Namely, along with visometry, ophthalmoscopy, skiascopy, biomicroscopy, ophthalmotonometry and perimetry, all children underwent autorefractometry and echobiometry (A-scan).

Biochemical analysis of blood for trace elements was carried out by the colorimetric method in the Central Research Laboratory of the ASMI. Determination of the content of trace elements in blood serum was carried out using atomic emission spectral analysis. Trace element analysis was carried out using gamma-spectrometric equipment. In lacrimal fluid samples, the total protein content was determined by the method of M.M. Bradford. The level of 25-hydroxy-cholecalciferol 25 (OH) D was determined by chemiluminescence immunoassay on microparticles, the content of 25 (OH) D in blood serum was estimated.

Results and its discussion. When determining the trace element composition of blood in patients with myopia, a significant decrease in the content of iron (Fe), copper (Cu) and calcium (Ca) ions in the blood was revealed, the content of zinc (Zn) ions, on the contrary, was increased.

The difference in the trace element composition of blood in patients with emmetropia and in patients with myopia of varying degrees was revealed. Thus, in patients with mild myopia, there was no significant difference in the content of Fe, Cu, Ca, and Zn ions in the blood compared with the content of these trace elements in patients with emmetropia. In moderate and high myopia, a significant decrease in the content of Fe, Cu, and Ca ions in the blood is observed in comparison with their content in patients with emmetropia. Their average indicators were 17.3 ± 1.6 , respectively; 12.7 ± 1.5 ; 1.85 ± 0.2 mmol / l; in the control group, their level was, respectively, 21.3 ± 1.2 ; 19.9 ± 1.5 ; 2.4 ± 0.8 mmol / L.

The results of the conducted studies showed that not only the level of Ca in the blood serum (1.85 ± 0.2), but also the excretion of Ca (2.3 ± 0.6 mmol / L) with urine in patients with myopia is significantly lower in comparison with indicators in the control group (2.4 ± 0.8 and 5.5 ± 1.4 mmol / l, respectively) (Fig. 2.). All this indicates an insufficient saturation of the supporting tissues of the body with them. In addition, a significant decrease in these indicators was revealed in progressive myopia.

Conclusions:

1. When assessing the trace element composition of blood in patients with myopia, a decrease in the content of iron (Fe), copper (Cu) and calcium (Ca) ions was revealed, while the content of zinc ions (Zn), on the contrary, was increased. In moderate and high myopia, a significant decrease in the content of Fe, Cu, and Ca ions in the blood is observed in comparison with their content in patients with emmetropia.

2. Analysis of the research results showed that not only the level of Ca in the blood serum, but also the excretion of Ca in the urine in patients with myopia is significantly lower than in the control group, which indicates insufficient saturation of the supporting tissues of the body with them.

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Food allergy (FA) is detected in 6-10% of children, and its frequency in childhood is higher than in adults. The most significant allergens are proteins from cow's milk, chicken eggs, peanuts, and seafood. Despite the fact that some types of FA are spontaneously eliminated in the first years of life, a significant part of cases at an older age are transformed into allergic diseases of the respiratory tract and skin [1].

In the review of Sidorovich O. I. et al. FA was found to occur in approximately 48% of patients with atopic dermatitis, 45% of patients with pollinosis, 15% of patients with bronchial asthma, and 15% of patients with allergic rhinitis [2].

Such a high interest in this problem is due to the fact that modern advances in the diagnosis and treatment of allergic diseases do not always satisfy patients, and many of them note the ineffectiveness of the standard treatment [3].

The aim of the study was to study the correlation between the immunological parameters of blood and saliva in children with food allergies.

Materials and methods of research. To study the immunological parameters of FA, 63 sick children from 3 to 10 years of age were examined, who were undergoing inpatient examination and treatment at the Bukhara Regional Children's Multidisciplinary Medical Center. All patients underwent immunological studies and studied the parameters of humoral immunity (IgA, IgM, sIgA, IgE) in peripheral blood serum and saliva by ELISA.

Results and discussion. The study of the factors of humoral immunity of the blood in patients with FA showed a characteristic imbalance in the composition of immunoglobulins. It was characterized by a significant decrease in the concentration of IgA to 1.36 ± 0.17 g/l and IgG to 9.54 ± 0.43 g/l ($P < 0.05$) compared with the data of the control group.

The IgM concentration tended to decrease against the background of a significant increase in the level of Ig E- 88.67 ± 4.84 IU / ml versus- 22.0 ± 1.2 IU / ml in the control. The study showed a significant 4-fold increase in Ig E- 88.67 ± 4.84 μ l in relation to the control parameters- 22.0 ± 1.2 μ l ($P < 0.001$).

During the exacerbation of FA in sick children, the linear correlation coefficient showed a strong positive relationship between blood and saliva IgE ($r = 0.80$) and an inverse strong relationship between saliva sIgA and blood IgE ($r = -0.78$). Consequently, in saliva, an increase in IgE is accompanied by a decrease in sIgA.

Conclusion: The established pattern makes it possible to limit non-invasive diagnostics and reduce the financial costs of tests. Thus, for the early non-invasive diagnosis of FA in children, it is advisable to determine the concentration of salivator IgE and sIgA.

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IMPROVEMENT OF THE METHOD OF PLASTIC SURGERY OF THE AURICLE WITH MICROTIA

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Abstract: Objective - To develop a method for plastic surgery of the auricle in microtia by optimizing the technical aspects of the collection of autcostal cartilage to create a full-fledged skeleton of the auricle, reducing the stages of plastic surgery, assessing the possibility of combining several moments of reconstructive intervention.

Material and Methods - To solve these issues, we propose an improved method of reconstructive otoplasty with the restoration of the auricle by implanting an autcostal cartilage frame in the behind-ear region. The method includes two main stages. The first step is to form the skeleton of the auricle from the autcostal cartilage and implant it into the behind-the-ear region in the reconstruction zone. Next, transposition of the auricle lobe is performed using the principle of Z-dermal plastics, as well as the formation of a tragus due to the costal cartilage section, the installation of a spacer made from the cartilage of the rudimentary auricle. At the second stage (after 3-4 months), the previously implanted frame is lifted together with the skin and the final plastic is performed. The use of this method makes it possible to improve the functional and aesthetic results of reconstruction of the missing auricle in two stages.

The objective of the proposed method is to reduce the time of surgical rehabilitation, taking into account the achievement of a good cosmetic result, as when using the prototype method, but by performing reconstruction in two stages.

The method is carried out as follows.

The operation is performed under intravenous anesthesia in combination with infiltration anesthesia with lidocaine solution 0.5% -60.0 ml. Stage 1: Taking, shaping and implanting a scaffold from the costal cartilage. The formation of the auricle lobe using the principle of Z-dermal plasty. Tragus formation due to the removed part of the rudimentary auricle. Stage II - raising the auricle with the formation of a deep groove. Implantation of a spacer to obtain a protrusion angle in accordance with the healthy side. The area after raising the auricle is closed with a split perforated skin graft. The break between stages is 3-4 months.

The costal cartilage is harvested from an oblique-transverse approach with a skin incision slightly above the costal arch on the side opposite to the reconstruction zone. The area of junction of the VI and VII ribs is a single block of tissues, sufficient for making the main part of the frame in the shape of the silhouette of the auricle. The free edge of the VIII rib is suitable for curl formation. The skeleton of the auricle is formed according to a template from a transparent film taken from the healthy side. The parts of the ear frame are stitched together with a polypropylene 4-0 thread. In the reconstruction zone, an auricle lobe is cut off. According to the Z-principle, plastics are used to transpose the lobe into the projection of the auricle. The opposite skin flap is not sutured, and a cartilaginous rudiment of the outer ear is isolated through this access. A "pocket" is formed in a sharp way according to the size of the prepared frame + 0.5 cm. The costal cartilage graft is introduced into the "pocket" starting from its upper edge. A previously removed cartilaginous rudiment of the auricle is implanted behind the graft for spacers. Two thin drainage tubes connected to a vacuum system are placed under and behind the frame. At the same stage, a tragus is formed by implantation of cartilage taken from the rib. This creates the appearance of the external auditory canal.

The second stage (after 3-4 months) is the raising of the auricle by separating the auricle from the tissues of the head and forming a space behind the ear. The wound behind the ear is closed with a split skin graft.

The proposed method of reconstructive otoplasty was performed in 29 patients with grade III microtia in the study group. It should be noted that the accumulated experience in the surgical treatment of this pathology, including 12 cases in the comparison group, operated according to B. Brent's method, showed that in some situations intraoperatively there is a deficit of soft tissues in the behind-the-ear region to perform adequate reconstruction. In this regard, in 7 out of 29 (24.1%) cases in the main group, the rapid balloon stretching method was used to obtain additional volume

of tissues behind the ear region. Another problem of the long-term period of otoplasty with microtia was an aesthetic defect in the form of hair growth on the formed auricle, which required regular implementation of various options for depilation. This is due to the fact that with microtia, patients often (25-50%) have a low level of hair growth in the temporal region, and taking into account the fact that this zone is used for plastics, further on the neo-shell, there is an increased hair growth in the flap with preserved hair follicles. In our observations, in order to level this aesthetic defect in the main group in the presence of a low location of the hair growth boundary (in 7 - 24.1% of patients), in addition to the reconstruction of the auricle, plastic with free skin flaps was used.

Results: Comparison of the results of reconstructive otoplasty was carried out in the main group (29 patients operated on by the proposed method) and in the comparison group - 12 patients operated on by the method of B. Brent. In total, complications developed in 6 (50%) patients in the comparison group and 3 (10.3%) in the main group. At the same time, the frequency of surgical complications, which subsequently led to the need for re-reconstruction, was 16.7% in the comparison group (in 1 case, marginal skin necrosis over the graft with exposure of a part of the frame and subsequent lysis of the cartilage, and in 1 case this complication later led to a pronounced deformation of the formed auricle). There were no such complications in the main group. The proportion of aesthetic deficiencies was 33.3% (4 patients) in the comparison group and 10.3% (3 patients) in the main group. In case of recurrence of severe deformity, as well as in 1 case in the comparison group with marginal skin necrosis that occurred after the stage of implantation of cartilage with subsequent lysis of the framework, patients underwent repeated reconstruction of the auricle 6 and 9 months later.

Conclusion: The use of a prepared skeleton made of autocostal cartilage, rudimentary cartilage in the form of a spacer, transposition of the lobe, formation of a tragus from a portion of the costal cartilage at the first stage of plasty and raising the auricle with final plasty at the second stage allows to reduce the time of surgical rehabilitation and to obtain an acceptable aesthetic and functional result of a complete reconstructive otoplasty in two stages.

The proposed two-stage method of otoplasty for microtia made it possible to completely neutralize the likelihood of developing surgical complications that led to the need for re-reconstruction (16.7% in the comparison group; $\chi^2 = 5.081$; $df = 1$; $p = 0.025$), as well as to reduce the proportion of patients with complications in general. from 50% to 10.3% ($\chi^2 = 7.791$; $df = 1$; $p = 0.006$), to reduce the likelihood of performing additional aesthetic stages of plasty from 41.7% to 6.9% ($\chi^2 = 7.248$; $df = 1$; $p = 0.008$) and thereby shorten the time period for complete reconstruction of the auricle from 9.5 ± 0.4 to 3.9 ± 0.2 months ($t = 13.40$; $p < 0.05$).

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Keywords: COVID-19, SARS-CoV-2, clinic, symptoms

Introduction. The emergence of the disease caused by COVID-19 in December 2020 posed challenges for healthcare professionals related to the rapid diagnosis and clinical management of patients with this infection. In most people who become infected, the infection is mild or asymptomatic (World Health Organization, 2020). In about 15% of cases, the disease is severe with the need for oxygen therapy, and in 5% of cases, the condition of patients is critical. Symptoms include fever, fatigue and dry cough, loss of taste or smell, body aches, sore throat, diarrhea, conjunctivitis, headache, and skin rashes (WHO, 2020).

Aim of the study. To study the clinical manifestations of moderate forms of COVID-19.

Materials and methods: A retrospective analysis of 119 case histories of patients with COVID-19 who received inpatient treatment at the clinic of the Research Institute of Virology was carried out. Patients were mainly with a moderate form of the disease, since at the time of the study, patients with mild severity were treated on an outpatient basis at home, and patients with severe forms were in the intensive care unit. Of the 119 people there were 64 men (53.8%), 55 women (46.2%) aged 20 to 76 years (the average age was 43.7 years). Patients were admitted to the hospital on average 6.15 ± 0.9 days of illness.

The diagnosis of COVID-19 was confirmed by PCR with hybridization-fluorescence detection using a kit "Vector-PCRRV-2019-nCoV-RG" (Russia, Novosibirsk).

Results. The most frequent clinical manifestations of the disease were: weakness (90.0%), cough (79.0%), fever (47.0%), decreased appetite (39.4%), listlessness (37.0%), shortness of breath (37.0%), sweating (34.4%), throat irritation (31.0%), headache (29.4%), sore throat (27.0%), chest pain (23.5%), agenesia (24.3%), anosmia (21.0%), difficulty breathing (17.6%).

There were also symptoms such as chills (10.9%), nasal congestion (10.9%), irritability (10%), diarrhea (8.4%), dry mouth (5.9%), nausea (5.9%), anxiety (5.5%), dizziness (4.2%), muscle pain (2.5%). In 65 patients, the disease proceeded with lung damage - pneumonia in 54.6% of cases.

Conclusions. 1. The most common symptoms of COVID-19 are weakness, cough, fever, decreased appetite, listlessness, shortness of breath, sweating and throat irritation.

2. Patients with COVID-19 showed symptoms that are rare in other respiratory infections, such as agenesia (24.3%), anosmia (21.0%).

IMPORTANCE OF MICRORNA-122 IN CHRONIC HBV AND HDV INFECTION

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Introduction. The introduction of non-invasive or minimally invasive methods for assessing the severity of the disease is very important for the early diagnosis of viral liver diseases. MicroRNAs are widely recognized as a new category of biomarkers for various pathological conditions and differential diagnosis of diseases. The study of microRNAs as non-invasive biomarkers is of particular interest in liver diseases.

Currently, there are few studies examining significant miRNAs in HDV infection, including liver fibrosis and liver cirrhosis associated with this infection, which requires the study of miRNAs in this pathology.

Aim of the study: to assess the expression level of microRNA-122 in patients with chronic HBV and HDV infection.

Materials and methods. To assess the expression level of microRNA-122, blood plasma samples were collected from 20 patients with chronic HBV infection, 34 patients with chronic HDV infection, and 20 healthy individuals. Total RNA was isolated using the miRNeasy Serum/Plasma kit (QIAGEN, Germany) according to the manufacturer's instructions. Reverse transcription polymerase chain reaction (RT-PCR) was performed using the miScript II RT kit (QIAGEN, Germany).

Results. It was examined 20 patients with chronic HBV infection, including 14 men (70%), 6 women (30%). The mean age of patients with chronic HBV infection was 51.5 years. Among 34 patients with chronic HDV infection, there were 27 men (79.4%), 7 women (20.6%), the mean age was 37.2 years. In 20 healthy people, markers of HBV infection (HBsAg), HDV infection (anti-HDV) and HCV infection (anti-HCV) were absent, and the mean age was 38.6 years.

An analysis of the results of the expression level of microRNA-122 in patients with chronic HBV infection showed an average value of 44.4, in patients with chronic HDV infection the average value was 412.9, and in the control group the expression level of this microRNA was 0.5. In a comparative analysis of the expression level of microRNA-122, the indices were much higher in chronic HDV infection compared with chronic HBV infection ($P < 0.01$). Thus, from the results of our studies, it can be assumed that microRNAs can serve as the main regulators of gene expression and are involved in the pathogenesis of both HBV infection and HDV infection.

Conclusions. In chronic HDV infection, the expression of microRNA-122 showed high expression, similar to those in the group of patients with chronic HBV infection. Circulating microRNA-122 in blood plasma play an important role in the pathogenesis of HBV infection and HDV infection and can be used as biomarkers of viral liver diseases.

The study of the expression of microRNA-122 in chronic HDV infection is of practical interest and requires further study on a wider scale, which will make it possible to assess their prognostic significance as a differential non-invasive biomarker.

ЗНАЧИМОСТЬ МИКРОРНК-122 ПРИ ХРОНИЧЕСКОЙ HBV И HDV-ИНФЕКЦИИ

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Внедрение неинвазивных или минимально инвазивных методов оценки тяжести заболевания является весьма актуальным для ранней диагностики заболеваний печени вирусной этиологии. МикроРНК широко признаны в качестве новой категории биомаркеров при различных патологических состояниях и дифференциальной диагностике заболеваний. Изучение микроРНК в качестве неинвазивных биомаркеров представляет особый интерес при заболеваниях печени.

В настоящее время встречаются единичные исследовательские работы, посвященные изучению значимых микроРНК при HDV-инфекции в том числе при фиброзе и циррозе печени ассоциированных с данной инфекцией, что требует изучения микроРНК при данной патологии.

Цель исследования: оценка уровня экспрессии микроРНК-122 у пациентов с хронической HBV и HDV-инфекцией.

Материалы и методы. Для оценки уровня экспрессии микроРНК-122 собраны образцы плазмы крови у 20 больных с хронической HBV-инфекцией, 34 больных с хронической HDV-инфекцией и 20 здоровых лиц. Тотальную РНК выделяли с применением набора miRNeasy Serum/Plasma (QIAGEN, Германия), согласно инструкции производителя. Полимеразная цепная реакция с обратной транскрипцией (ОТ-ПЦР) проводилась с использованием miScript II RT набора (QIAGEN, Германия).

Результаты. При обследовании 20 пациентов с хронической HBV-инфекцией, из них мужчин 14 (70%), женщин 6 (30%). Средний возраст пациентов с хронической HBV-инфекцией составил 51.5 лет. Среди 34 пациентов с хронической HDV-инфекцией мужчин было 27 (79,4%), женщин 7 (20,6%), средний возраст составил 37.2 лет. У 20 здоровых лиц отсутствовали маркеры инфицирования HBV-инфекции (HBsAg), HDV-инфекции (анти-HDV) и HCV-инфекции (анти-HCV) и средний возраст составил 38.6 лет.

Анализ результатов уровня экспрессии микроРНК-122 у пациентов с хронической HBV-инфекцией показал среднее значение – 44.4, у пациентов с хронической HDV-инфекцией средний показатель составил 412,9, а в контрольной группе показатель уровня экспрессии, данной микроРНК составил 0.5. При сравнительном анализе уровня экспрессии микроРНК-122 показатели были гораздо выше при хронической HDV-инфекции по сравнению с хронической HBV-инфекцией ($P < 0.01$). Таким образом, из результатов наших исследований можно предположить, что микроРНК могут служить в качестве основных регуляторов экспрессии генов и участвуют в патогенезе, как HBV-инфекции, так и HDV-инфекции.

Выводы. При хронической HDV-инфекции экспрессия микроРНК-122 показала высокую экспрессию аналогично показателям в группе пациентов с хронической HBV-инфекцией. Циркулирующие микроРНК-122 в плазме крови играют важную роль в патогенезе HBV-инфекции и HDV-инфекции и могут быть использованы в качестве биомаркеров вирусных заболеваний печени.

Изучение экспрессии микроРНК-122 при хронической HDV-инфекции представляет практический интерес и требует дальнейшего изучения в более широком масштабе, что позволит оценить их прогностическую значимость в качестве дифференциального неинвазивного биомаркера.

ANTHROPOMETRIC INDICATORS OF BOYS IN AGE FROM A NEWBORN TO 3 YEARS IN THE CITY OF URGENCH.

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Abstract. To assess the physical development of a child, body weight, height, chest and head circumference are important. Without studying the anthropometric normative parameters of different age groups, it is impossible to predict pathologies among newborns and children. Studies conducted over the past years in various regions of our Republic, as well as in our regions, have shown that we could not find detailed works on the physical development of children and newborns in the available literature. Therefore, one of our main tasks was to measure the anthropometric indicators of children in the city of Urgench.

Key words: physical development, anthropometry, children

Purpose of the research: To study the specific dynamics and parameters of physical development of children under three years old in the city of Urgench. The material for the study were practically healthy children, from maternity houses, pupils of children's gardens of Urgench. In total, 260 children were examined, including 110 boys and 150 girls aged from newborn to 3 years. General anthropometric indicators were studied in the following order: body weight was measured using medical scales designed for newborns and adults (kg). To measure height while standing, a standard type stadiometer was used. In this case, the child's body was free, without touching the vertical bar. Measurements of body length or height while sitting, as well as body length were carried out. The chest circumference was measured with a measuring tape. The obtained data were subjected to statistical processing on a Pentium IV computer using the Microsoft office Excel 2010 software package, including the use of built-in statistical processing functions. Studies have shown that the weight of newborns for the first time 10 days on average is between 3100-3900 g, boys weigh 100-145 g more than girls. The height of the newborn was measured from the top of the head to the heel and averaged 52 cm, varying between 47-56 cm. For the first 3-5 days after birth, a physiological weight loss of up to 300 g of initial weight occurs. The initial weight is recovered for 10-12 days after birth, at this time the length increases by 2.1 cm 1,9. Indicators of growth of children of the male sex from 48.0 cm to 54 0 cm, the average was $51 \pm 2, 02$ cm. The weight body ranged from 3.55 kg to 4.6 kg on average equals $3.95 \pm 0, 19$ kg. Chest circumference in pause lies in the range from 12.3 to 15.2 cm, the average - $13.7 \pm 0,68$ cm at height inspiratory chest varies from 13.90 to 15.7 cm, an average of $14.80 \pm 0, 70$ cm with full breath -. from 12.8 cm to 14 4 cm on average $13.6 \pm 0, 61$ cm, transverse diameter ranges from 8 breast, 0 to 12.3 cm, the average - $10, 30 \pm 0.38$ cm. Considering the active development of the baby, growth is extremely important for assessing the state of health and nutritional balance. It is believed that the norm is an increase in height of about 25 cm per year. The data obtained showed that growth in children aged from newborn to 3 years old increases 1.80 times. It should be noted that the highest rate of growth and body weight is observed from 1 to 3 years. The size of the chest circumference in a pause from 1 to 3 years in healthy males increases 1.29 times more than in girls.

PEDAGOGICAL SCIENCES

STUDENT- CENTERED TEACHING MODEL IN AZERBAIJANI EDUCATION SYSTEM

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Abstract: It is known that the basis of education policies in the world is a human centered education system. Since Azerbaijan gained independence (1991), an education model based on student- centered education has been developing in the country. The main purpose of this education model is to form the learner as an independent- minded personality, to take his interests, abilities, choices and needs into consideration and to teach how to learn. The study aims to determine the advantages of student-centered education, the comparison of traditional and student- centered education and additionally, the steps taken related to the implementation of the world student-oriented education model in Azerbaijani education system, while preserving its national, spiritual and cultural values.

Key words: student- centered education, Azerbaijan education system, student, comparison, traditional education system

Since Azerbaijan gained independence, education has developed quickly and achieved significant success. A new education system has been created, based on humanist and democratic principles and serving the development of the state and its people. The principles such as humanism, democracy, secularism, equality, quality, continuity, liberalization and integration are among the basic ones of Azerbaijani education policy.

It is known that human is the only being that needs training. Through education, he becomes aware of his unique personality, thoughts, needs and potential and becomes an independent individual. According to Abraham Maslow, human has an immutable and inner nature. It is possible to discover the inner nature, not to examine and create it scientifically. Thus, the main purpose of education is, first of all, to accept each individual as a personality and to discover their potential. As a matter of fact, it is inevitable that this issue will occur in a student- centered education environment. According to the educational psychologists, N.L. Gage and David C. Berliner, there are 5 main features of student-based education.

1. Encouraging personal guidance and independence
2. Giving responsibility to choose what to learn
3. Developing creativity
4. Skepticism
5. Artistry

It is known that creating a student-oriented classroom environment has a fundamental role for the personal development of learner. According to the research carried out, the skills of learners such as problem solving, critical thinking, expressing himself independently, expressing different opinions, self- discovery, self- evaluation, selectivity have been improving in this classroom environment. Unlike student- centered education, The main purpose in the traditional classroom environment is to give information only by teacher and to be memorized by learners. In the learning process, the student is considered as the object of this process and plays a passive role in the lesson. The basic structural elements of traditional learning technologies are as follows.

- Questioning of the former subject
- Assessment
- Explaining of the new subject

- Strengthening knowledge and understanding of the subject
- Giving homework

In traditional education, the student's opportunities and creative activity are restricted. [Məcid, 2014, p. 119].

Comparison of student-centered and traditional education [Kemal, 2015, p. 63]

Application	Traditional education	Student- centered education
Activity in the classroom	Instructive	Interactive
The role of teacher	Didactic	Participant, encouraging, motivating
The role of learner	listener	Participant, taking responsibility
The period of lesson	Data	Relationships
Knowledge acquisition	By memorizing	Questioning and discovery
Success indicator	Quantity	Performance, quality
Evaluation	According to the norm	According to improvement and criteria

The State Strategy on Education Development in the Republic of Azerbaijan has been signed on October 24, 2013 in order to create a student- centered model in the Azerbaijani education system. The aim of this strategy is to develop student- oriented education, to increase the quality of education, to raise independent-minded Azerbaijani citizens, to modernize human resources in the field of education.

The features of student- centered teaching model in Azerbaijani education system are as follows.

- Forming the learner as an independent-minded personality
- Taking his interests, abilities, choices, needs into consideration
- Listening to the emotional state of the learner and treating him with respect;
- Developing the individuality, cognitive problems and personal characteristics of the student and creating favorable conditions for this

- Paying attention to humanizing "teacher-student" relationships in the learning process
- Avoiding the environments such as pressure, intimidation and punishment in education
- Encouraging learners to collaborate in a classroom environment without competition
- Giving the student the opportunity to confirm himself in the learning-teaching process

The main purpose of Azerbaijani education system today is to raise a person possessing high moral and humanitarian values, being able to think creatively and solve any problems, being open to change, being responsible and respectful to both himself and others. In order to achieve all these, building a person- oriented education system has been studied as an important factor.

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FROM THE POSSIBILITY OF OVERCOMING THE NEGATIVE EFFECTS OF DEMOGRAPHIC FACTORS IN THE TRAINING PROCESS

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Abstract: The research examines the possibility of overcoming the negative effects of demographic factors manifested during the learning process. It shows that there are a number of shortcomings in the study of demographic events and facts during the training process and in overcoming their effects. Many teachers do not pay attention to demographic problems and do not pay attention to the analysis of their impact.

A number of experienced teachers are able to neutralize problems encountered during the learning process using specially selected methods.

Keywords: learning process, teacher, student, negative impact, school, demographic factor

The learning process has its own opportunities to neutralize the negative demographic effects. An analysis of teachers' work experience shows that although they do some educational work to neutralize the negative effects of demographic factors, they are often unable to make effective use of teaching opportunities in this area. As a result of demographic factors such as death, divorce, remarriage, students' cognitive activity in classes gradually weakens, their interests change, informal children's groups play a key role in meeting the needs of communication and the formation of wealth tendencies, and their own expectations are unpredictable and in their system of pricing, claim levels, etc. changes occur. These aspects should be taken into account consistently when conducting pedagogical correction work in the training process. Special attention should be paid to the activation of students' cognitive activities in the classroom. The teacher must cultivate students' cognitive interests and help them see their own perspectives.

An analysis of teachers' work experience shows that there are serious shortcomings in the study of demographic events or facts in the process of training. Most teachers do not really pay attention to the interpretation of demographic events, they treat them as ordinary social events, at best, they simply state the relevant facts.

Some teachers do not have a scientific and pedagogical approach to the clarification and analysis of demographic events and facts in one form or another in the process of training, not only unable effectively use the educational opportunities of the lesson, but also create misconceptions in the bars of students themselves. Experienced teachers have a great influence on the elimination of negative demographic factors in the process of training. They interpret demographic factors in the logical course of the subject, and to attract attention on their diligence, optimism, ingenuity, creative determination, etc., while clarifying the biography of writers and poets, the difficult moments of their lives.

The teacher should try to penetrate into the inner world of students using appropriate methods and to cultivate and form in them the will-spiritual qualities in the process of training. By creating the right attitude to demographic events and facts, favorable conditions must be created for students growing up in incomplete families to gradually change their attitudes towards themselves and their classmates.

As a result of the research, it is clear that teachers have to be more attentive to the pedagogical conflicts that have led to demographic problems, and that they have to use special methods of training and influence. This is because the chosen methods and forms of use allow not only to resolve the conflict, but also to regulate the performance, characteristics, and confidence of students in the learning and future of those affected by the negative demographic processes during the training process.

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Abstract: The staffing of the reforming of all spheres of life in the country and the related radical increase in the efficiency of the higher education system is one of the main goals of large-scale transformations in Uzbekistan. One of the urgent tasks of the modern requirements of the current stage of reforms is the strengthening of citizens' self-government bodies and NGOs by young specialists with higher education at the level of international standards.

Key words: higher education, mahalla, staffing, Uzbekistan, modernization, non-governmental non-profit organizations, young specialists.

The effective implementation of the tasks laid down in the Strategy of Actions for the Further Development of our country, initiated by the Head of State, is associated with staffing the reform of all spheres of the country's life and the related radical increase in the efficiency of the higher education system in Uzbekistan.

Uzbekistan needs such a system of higher education, which has the ability to influence through educational processes on the complex of human, primarily youth, resources to contribute to the achievement of socially significant scientific and educational goals facing the country. The more complete the correspondence between the structural and functional elements of human resources in Uzbekistan, the higher the potential and efficiency of its functioning.

At the same time, the idea of the country's human potential as the total potential of its resources in their interconnection requires knowledge of not only the qualitative and quantitative characteristics of human resources, but also indicators describing the activity of interest as a whole, as well as knowledge of the available but not yet used resources.

Citizens' self-government bodies (CSOs) and non-governmental non-profit organizations (NGOs) occupy an important place in the reforms in Uzbekistan.

Makhalla is historically the most important self-government body of citizens in Uzbekistan. Article 105 of the Constitution of the Republic of Uzbekistan is the legal basis for the activities of the mahalla as a body of self-government of citizens [1]. Mahalla has always been the center of public opinion, the preservation of national values, and the solution of pressing life problems. President Shavkat Mirziyoyev rightly noted that the makhalla should be the abode of peace and tranquility, mutual respect and education [2].

Thanks to the mahalla, special principles of motivating the social and economic behavior of the population, respect for social values, ethics of relationships, guaranteeing the unconditional fulfillment of obligations and responsibility before society have been formed and preserved in Uzbekistan for centuries [3].

Mahalla is characterized by a certain degree of normative ordering of social relations. There is a system of social norms and rules that determine stable forms of social interaction of people, carried out to achieve the goal of the makhalla. The system of normative behavior of people operating here includes various social norms - the rights of citizens, public entities, morality, customs of tradition, acting as regulators of the development of progressive and prevention of negative phenomena.

If in the past, participation in the mahalla administration was limited to fulfilling public assignments, attending mahalla meetings and solving only narrow issues, today the role of a participant in the mahalla administration is the role of an initiator of progressive transformations, showing his energy, competence in organizing public works, in developing various programs, bills, other normative documents, new approaches to solving important problems of public life. Along with their social activity in Uzbekistan, a number of measures are being implemented to create organizational, legal, material conditions for their formation and development.

Uzbekistan has set itself the goal of building a democratic rule-of-law state with a dynamically developing economy and an open civil society, in which a person is the highest value, his rights, interests and freedoms are protected, and there are favorable conditions for self-realization. The

creation and development of independent, stable, diverse institutions of civil society, enjoying the support of broad strata of the population, was identified as the most important task along this path.

The importance of the “third sector” in the state and social construction of any country that has set itself the goal of forming a civil society is great, since it provides citizens with the opportunity to realize their potential, improve the socio-political, socio-economic and legal culture, ensure their interests and lag behind them [4].

Considering all of the above, the task of strengthening citizens’ self-government bodies and NGOs by young specialists with higher education at the level of international standards, possessing good knowledge, organizational qualities, as well as creating the necessary conditions for the implementation of training based on the modern requirements of the current stage of reforms becomes urgent.

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Abstract: The issues of the development of philosophical thought on environmental problems, on the role of philosophy and social ecology in the formation of a person in new experiments are considered communication, in intellectual support and the formation of his worldview.

Key words: ecology, eco-philosophy, worldview, ecological problem, environmental issues.

The current stage of development of society is characterized by an exacerbation of the global environmental crisis, which is becoming the main obstacle in solving socio-economic, political, spiritual and other problems and largely determines the current life of people. Humanity has come to a very important stage in its interaction with the natural environment. The aggravation of environmental problems has called into question the security and very existence of human society, as well as its ability to adequately respond to emerging threats and challenges[1].

The versatility and globality of contemporary environmental problems also lie in the fact that they are primarily of universal human and general historical significance. After all, we are essentially talking about human health, about the threat to the very foundations of human existence due to the depletion of natural resources and the pollution of the environment that is dangerous to human life. Moreover, these are questions of the future. The conditions in which subsequent generations will live depend on their joint decision. Consequently, the growth and aggravation of environmental problems, their merging at the present time into the global environmental the crisis, the related anxiety of the world community forced scientists to come to grips with the causes of the destruction of the natural environment, looking for ways to reduce the severity of modern environmental problems and study both the most general and specific issues of social ecology[2].

The problem of greening society is being actively discussed and studied by modern science under the influence of global changes in the planetary shell of the Earth, caused by scientific and technological progress. Currently, the level of socioecological knowledge makes it possible to determine modern society as a socio-natural system that covers the spheres of human life, territorial forms of settlement, social institutions and sociocultural values that regulate natural processes and the activities of social communities. However, the ongoing global pollution of the environment, the destruction of ecological systems under the influence of machine production cannot be called a reasonable attitude man to nature. Overcoming global and regional crises in the “society - nature” system remains the most important goal of the formation of the noosphere as a planetary formation necessary for the survival and safe progress of human civilization. In our time, the threat to the environment has acquired not only a global character, but created a pre-crisis situation, which, under certain conditions, may develop into a state of crisis and become dangerous for a person and the world community as a whole. Therefore, the situation needs to be radically changed. And philosophy can play a rather important role in solving this problem. Many thinkers see the cause of environmental disasters in man himself, in his ability to create and apply technologies that destroy life in nature; in his immoderate desire for consumerism and enrichment at the expense of nature, in his traditional position of the owner, the king of nature. This and stereotypes of thinking and behavior must be changed.

The problem of the formation of ecological knowledge is by the second half of the twentieth century. It was from this time that humanity began to realize the negative consequences of its activities: environmental pollution (atmosphere, hydrosphere, soil cover, etc.), the disappearance of a number of animals and plants, the destruction of natural biogeosystems, the irrational use of natural resources and many others, which led to ecological crisis. Here why the philosophical, system-logical, cultural, socio-axiological, economic, environmental, psychological, legal and other studies related to the need to understand and predict human interaction with natural life. This gave impetus to the study of the processes of ecologization of modern scientific knowledge. Man is not the king of nature, he depends on natural resources, on the state biosphere. The resources of nature are not endless, but finite, and many of them are close to exhaustion. Changing the attitude to nature, treating all living things with care: both nature and man, saving natural resources, recycling waste - these are the tasks that have come to the fore today. The preservation of the biosphere is a prerequisite for the survival of mankind.

At present, attempts are being made to define ecological knowledge through its correlation, for example, with individual sections of natural, technical and socio-cultural disciplines. To solve this problem, such a degree of development of ecological theory is necessary, which would become the scientific foundation for the ecologization of scientific knowledge. A special place in the formation of a holistic model of the ecologization of scientific knowledge is occupied by the problem of studying the synthesis of the theory of ecology with the concepts of noospheric movement and sustainable development of nature and society.

The versatility and globality of contemporary environmental problems also lie in the fact that they are primarily of universal human and general historical significance. After all, we are essentially talking about human health, about the threat to the very foundations of human existence due to the depletion of natural resources and the pollution of the environment that is dangerous to human life. Moreover, these are questions of the future. The conditions in which subsequent generations will live depend on their joint decision.

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PHILOLOGICAL SCIENCES

ENGLISH LANGUAGE ASSESSMENT FOR MEDICAL TEACHERS

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Abstract. The level of English language knowledge and regulation of activities in this regard is one of the urgent tasks for pedagogical staff of higher educational institutions of non-language higher educational universities in Uzbekistan, in particular, for the medical pedagogical staff. The preparation of the highly qualified specialists for medical sphere is aimed at operating in accordance with modern requirements, achieving important indicators leading to progressive updates. The high level of English language knowledge within the framework of the medical specialization is one of the important factors in the formation of professional and innovative skills. It applies to such areas as the learning of the world experience, understanding of the foreign literature, communication with foreign colleagues in medical sphere. Here, it is important to correctly assess their qualification indicators of English language skills, as well as understanding of the basic principles of achieving high results.

Key words. Teaching, English, assessment, education, knowledge, pedagogical, methodology, specialty.

Introduction. The proficiency in English of medical sphere specialists becomes one of the most important tasks in the requirements of higher education. As the English language is increasingly being introduced into modern life in all spheres of the development of the society, there is also an urgent need for specialists with the knowledge of English language in the field of medicine. In connection with the adoption of the Law of the Republic of Uzbekistan “About Education” dated September 24, 2020, the development of higher education in the country needs to be improved in accordance with the requirements of international standards. Large-scale reforms in the field of improvement of high education put forward an increasing need for new standards and methodologies, and, accordingly, a comprehensive language competence of university teachers in the country. The study of foreign languages should permeate the entire content of the educational system. Besides, the huge reforms in the high education define such tasks as the process of organizing teaching in the educational system, the modern system of assessment of the activity, knowledge and pedagogical skills of the teachers, the transformation of universities into communication centers in exchange of innovative and technological ideas [1]. The task of organization of teaching specialty subjects in English, purposeful training of pedagogical staff who can teach and master the specialty in English is also set [2], as the dynamics of foreign language achievement requires a new look at the skills and abilities of university teachers with constant improvement of their skills, taking into account globalization demands and the standards of the modern world.

Methodology. In accordance with the above-mentioned regulatory documents and the effectiveness of mastering foreign languages at all levels of the educational system of the country, as well as in order to create foreign language communicative and professional competence of specialists in all areas of development and further integration of the country into the world community, it is necessary to plan activities in the given field, that include:

1. The goal, which implies the creation of the potential of a new generation of personnel that meets international standards;
2. The reason, that indicates professional development and the need for foreign language achievements of teaching staff;
3. Actions, with all the necessary steps of the activity;

4. Deadlines, which defines the frame and action for a certain period of time;
5. Assessment, in order to find out how it works.

Taking into account the need to train relevant specialists not only for medicine, but for all sectors of development, such as economy, industry, manufacturing, as well as the field of informatization of all spheres, and the service sector which is based on high technologies, it is necessary to provide high-quality education specialists, with mentioning following factors:

- The current pace of development of pedagogical technologies and increasing innovative literacy requires completely new approaches in the educational system.
- The global labor market dictates new conditions and requirements for current professionals.
- There is a need to train more stable and highly qualified specialists.
- A high-quality education in accordance with the current and future needs for medical personnel becomes an urgent task, so the training of medical specialists with the knowledge of English, meet international standards, and are able to participate with dignity in the process of international cooperation is really important.

Conclusions and recommendations. Based on the above, teaching English the medical teachers and correctly evaluating their knowledge leads to a noticeable improvement in their language mastery. The basic tasks of English language courses for the professors and teachers of medical universities are:

1. Fixation of knowledge, skills and abilities in studying foreign language at the listeners of the course.
2. Reading and understanding of texts with specific themes.
3. Formation of skills and abilities in studying foreign language such as understanding, speaking, reading, writing and translating.
4. Self-study skills in studying foreign language.

The methodical maintenance of the curriculum include practical courses, discussions and debates, projects, self-study, presentations, portfolio notes, inventory forms, role games and interactive methods from Internet web-sites and other resources such as various speech situations, texts, tests and exercises with video and audio materials. The results and prospects imply the achievement of the level B2, development of specific skills of language competence in the specialty, training of highly qualified personnel for the labor market, career development. The specifics of the medicine modified to choose the necessary language directions, depending on their professional goals and objectives.

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AGRICULTURAL SCIENCES

ANALYSIS OF SEA WATER TAKEN FROM THE AREA CASPIAN SEA

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It was analyzed with the help of Caspian Ecological Laboratory taken seawater from Shikhov to detect toxic substances as a result of oil mixing into the Caspian Sea water. The main ingredients in these waters are Polycyclic Aromatic Hydrocarbons.

Polycyclic Aromatic Hydrocarbons (PAH) are the dangerous organic pollutants which are spreading to the environment as a result of imperfect burning of fuels and also based on refuse of oil and oil products. Most Polycyclic Aromatic Hydrocarbons are environmentally responsible for pollution of the environment and water as a result of their long stay and has a serious impact on biodiversity. Ecological tension caused by the transport and accumulation of Polycyclic Aromatic Hydrocarbons has become one of the most pressing problems in the world over the last few years.

PAHs are composed of two causes in the environment based on human and natural sources. Industrial waste such as food, leather, vegetable oil, soap, chemical, metal, plastic, paint and textile, heavy metals, polychlorinated biphenyl (PCB) and derivatives, Polycyclic Aromatic Hydrocarbons (PAH), chlorinated benzofurans and dioxin are known pollutants. PAHs dominate in removals from ships, oil transported by tankers and oil products that emerge as a result of transportation. PAHs are one of the major pollutants that pollute the environment with known carcinogens, toxicological and mutagenic properties.

PAHs are dominated in the oil products spreaded to environment, the oil shipping with tankers and the redundances fired from ships. PAHs are one of the main pollutants for the environment which has carcinogen, toxic and mutagen peculiarities.

In 2000 it has been proven that PAHs have mutagen, carcinogenic properties and endocrine functions in organisms. At the same time, PAHs are one of the most important types of persistent organic pollutants found in the water area. Due to low solubility and high hydrophobic properties, the special substances in the water tend to accumulate in adsorption and sedimentation. The shipping of PAHs in water is mainly due to the mechanism of holding and balancing between water and solid phase. The table below summarizes the results of the water taken from the Shikhov region of the Caspian Sea comparison with the tap water (Kur River).

Table 1.

Polycyclic Aromatic Hydrocarbons (PAH), mkg/l	Tap	Caspian
naphthalene	<0.01	<0.01
acenaphthylene	<0.01	<0.01
acenaphthene	<0.01	<0.01
fluorene	<0.01	<0.01
phenanthrene	<0.01	<0.01
anthracene	<0.01	<0.01
fluoranthene	<0.01	<0.01
pyrene	<0.01	<0.01
Benzo(a)anthracene	<0.01	<0.01
chrysene	<0.01	<0.01

benzo(b+k)fluoranthene	<0.01	<0.01
benzo(a)pyrene	<0.01	<0.01
indeno(1,2,3-cd)pyrene	<0.01	<0.01
benzo(ghi)perylene	<0.01	<0.01
Dibenzo(ah)anthracene	<0.01	<0.01
Total EPA 16 PAH	<0.01	<0.01

Key words: PAH, area, pollutants, water, Caspian Sea, etc.

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Advantages of using pesticides A plentiful supply of fresh products is vital for a healthy population. Numerous scientific studies demonstrate the health benefits of regularly eating a variety of fresh fruit and vegetables; and consumers are increasingly aware of these benefits. Agricultural productivity is a key to ensuring that this demand can be met at an affordable price; and crop protection products help increase productivity and usable crop yields. The crop protection industry's primary aim is to enable farmers to grow an abundant supply of food in a safe manner and prevent costs from increasing. Food production processes benefit from continual advancements in agricultural technologies and practices; in fact, a population now nearly twice as large has more food available per capita than 40 years ago. Tools such as herbicides, insecticides, and fungicides reduce crop losses both before and after harvest, and increase crop yields. For example the effect of killing caterpillars feeding on the crop brings the primary benefit of higher yields and better quality of cabbage. The four main groups of pesticides such as the organochlorine, organophosphate, carbamate, and pyrethroid insecticides are of particular concern because of their toxicity and persistence in the environment; however several of the banned pesticides are still used on a large scale in developing countries and continue to pose severe health and environmental problems. Pesticide use raises a number of environmental concerns, and human and animal health hazards. Over 98% of sprayed insecticides and 95% of herbicides reach a destination other than their target species, including non-target species, air, water and soil. Pesticides are one of the causes of water pollution, and some pesticides are persistent organic pollutants and contribute to soil contamination. As a result, we are closely exposed to pesticides in the food and water we consume and in the air we breathe. Unfortunately these chemicals are non bio degradable, persistent and get accumulated in the environment and thus into the human food chain. Despite regulatory measures, these compounds continue to be detected in measurable amounts in the ecosystem including marine life.

This is the time that necessitates the proper use of pesticides to protect our environment and eventually health hazards associated with it. Alternative pest control strategies such as IPM that deploys a combination of different control measures such as cultural control, use of pesticides could reduce the number and amount of pesticide application. Further, advanced approaches such as biotechnology and nanotechnology could facilitate in developing resistant genotype or pesticides with fewer adverse effects.

Key words: pesticides ,benefits, hazards, genotype, agriculture.

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STATE AND LAW

HONG KONG EXPERIENCE IN THE FIGHT AGAINST CORRUPTION

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Abstract: This article highlights the role and role of Hong Kong city-state, a specialized administrative region of the people's Republic of China, in the fight against corruption.

Keywords: PRC, Hong Kong, Murray Maclexouz, «prove that you have not acquired your property to pora evazi!», Media, «independent commission against corruption» etc.the G.

INTRODUCTION:

Hong Kong is a specialized administrative region of the people's Republic of China, and until 1997 it was considered a colony of Great Britain. In the middle of the twentieth century, Hong Kong corruption was «steeped in the swamp» (94% of the state authorities were corrupt). Murray Maclexouz as governor to the top of power (the period of the British colony 1971-1982 y. upon arrival, the state administration began to radically reform and the following practical measures were taken:

- 1974 M.Murray has established an independent Anti-Corruption Commission, which is not subject to any state body. The commission had very broad powers, they could conduct an investigation in any public authority or organization suspected of corruption.

- The presumption of innocence against officials and civil servants, that is, the case of every person accused of committing a crime, is considered in legal order in the court, the principle of his innocence is abolished until the judgment of the court on his guilt comes into legal force, and instead «prove that you have not acquired your property to the Pura evasion!»the principle was established. If an official or civil servant could not prove that he had legally opened a car, a house or a foreign bank account, which he had bought, he would be sentenced to unconditionally for a long term. As of the first year of the commission's activity, 220 officials were convicted as subjects of bribery crimes;

- on the activities of the Anti-Corruption Commission, the observation of organizations that carry out public control, consisting of intellectuals and entrepreneurs, was established and any employee of the commission who did not perform his duty on conscience was dismissed;

- The cleaning of the police system has begun. Former Hong Kong police chief pora is jailed for taking over;

- The activities of the local media to freely publish any news related to corruption and conduct journalistic inquiries have been fully ensured. Journalists conducted an independent investigation into any suspicious economic activity carried out by officials and their family members, respectively, the commission immediately reacted to such media announcements.

As a result of the large-scale measures carried out, the level of corruption in Hong Kong has sharply decreased, today it is considered one of the best developed regions of China's economy (in 2017 it was recorded on 13 place in the list of Transparency International and was awarded 77 points in the rating system of 100 points).

According to the data obtained, one factor is that corruption in the Hong Kong public sector was 94 percent, it is now 2-3 percent. As in kupgina countries of Asia, it is a historical habit to express worthy gratitude for the service rendered in this country, where they practically live without corruption. In the rating of Transparency International, Hong Kong occupies 12-th place, while uzi is still above the

UK, which is subject to one vakts. In this regard, Hong Kong, Japan, Austria and Germany are both partners. One factor is that Hong Kong's public sector accounted for 94 percent of the corruption they managed to overcome through three simple means of action. In the first place, officials were forced to lose weight, proving that the Uzi buy olgai things were taken for legal money. Otherwise, the property is confiscated and the uzi is siyed with a minimum punishment of up to 15 years. The activities of the commission are monitored by public organizations, and the employee whose impurity is confirmed on the basis of documents, they will be able to discharge from work.

In the endgisi ordinary fukaros and journalists were given the opportunity to report on bribery. They became helpers of the Anti-Corruption Commission. Journalists were allowed to knock down the case of bulsa, Khar kandai officials. More than that, in Hong Kong, it was tossed to persecute the bearers, which means that the Hara officer is always to blame.

All the facts and information about the arrest and detention of the most prominent corrupt officials are publicly available in the media. People began to notice that high-ranking officials are also being punished. The belief that Axoliping found the truth in the fight against corruption increased and began to support the government. For example, in March 2011, the anti - corruption Independent Commission released a report alleging that Hong Kong's leading media company, General Manager Mr. Chan, was accused of his personal assistant, the company's professor and the head of business projects, and that this news caused most of the urban areas to be in a state of shock. Birok, karamay on Mr Chan's reputation, because the police took him camouflage there because who ugri, VIP-person or ordinary fukaromi is load of the difference in this, all times in front of the cop.

30 years ago in Hong Kong, corruption was considered normal, and 90 percent of civil servants were involved in corruption. In 1974 year under the name of the «Independent Anti-Corruption Commission», the state structure was established, the salaries of employees and officers of this salting were high, which personally reports to the governor. The civil servants themselves had to prove that they legally acquired the property. If this has not been done, they can be arrested and confiscated their property. Also, citizens who participated in the work of an independent commission were encouraged through complaints, informing the authorities about the cases of obtaining a pension in the fight against corruption. The result was clear-in 2017, Hong Kong Transparency International ranked 12th in the ranking of countries in the index of understanding corruption.

Hong Kong, which is located next to China, is also worth praising for its success in the fight against corruption – previously almost all government agencies of the country were immersed in the swamp of corruption. To get out of this swamp, the following measures were taken: it is necessary to prove that the state officials bought all their property, cars and other valuables to their funds, which they honestly found. If he can not prove it, then the prison will wait for him and all his property will be confiscated. Secondly, in 1974, an «independent Anti-Corruption Commission» was established here, the commission consisted of officers and intellectuals and businessmen. They receive a very large salary and are subject only to the governor. Finally, Hong Kong residents and media representatives were given ample opportunities to fight bribery – citizens could complain to the commission over the officer who asked for pora, while journalists could investigate any officer's activities. And the result is amazing – in 30 years the level of bribery fell from 90 percent to 3 percent.

Hong Kong began to implement anti-corruption measures from 1974 year. Three effective measures were taken against corruption:

The first remedy. The presumption of innocence for officials was canceled. Instead, the principle of proof was introduced, if you did not bribe the property. According to Hong Kong law, an official is sentenced to up to 15 years in prison if he can not prove that the funds or property on his account abroad are obtained legally.

The second measure. In 1974, an independent commission was established to combat corruption. Neither the Ministry of internal affairs nor the security agencies will be able to interfere in the work of the commission. The monthly salary of members of the commission is 20-30 percent higher than that of employees of law enforcement agencies. The commission not only identifies porn offenders, but also deals with the work of profiling, that is, actively works in organs, services with a high tendency to corruption. The commission is constantly investigating whether new schemes are being thought up or used by bribes, improving their chances of fighting them. The commission has the right to conduct an examination in any ministry or office, even if there is a suspicion of linen.

The third measure. Ordinary people and journalists were given the opportunity to tell about bribes. People have become an assistant to some extent an independent commission. And journalists have the opportunity to get acquainted with the work of any official in full. In addition, in Hong Kong, the punishment of the payers of pora was canceled. The official is always to blame.

The most important thing is that all activities related to the capture, search of corrupt persons are widely covered in the media. It is how people feel when they see that high-ranking officials are receiving punishment. People have increased confidence in the fight against corruption. They fully support the government's efforts in this regard.

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Abstract: The legal break of the legally established marriage bond is called “divorce”. Marriage and maintaining marriage are described as respectability and success in some societies. Therefore, in the process of getting a divorce, spouses should struggle with the loss of their social status as well as the disappointments which they experience in their relations. If these spouses have children, they may feel more anxious and experience more conflict when making the decision to continue or end their problematic marriage.

Although the separation does not have a very preferable result, the idea of continuing their marriage can be more harm than its good side if the union, love and the desire to live together cannot be maintained. It should not be forgotten and so many people accepted that divorce is a shocking process, whether a child or not. Problems can only be solved by accepting them.

Key words: education process, adolescent, adolescence, socialization, family, personality

The answers to the question “What would happen if you did not get divorced?” That I asked parents and adolescents who come with divorce problems also support these findings. There is a widespread opinion that adolescents from divorced families may have emotional problems, but studies show that the vast majority of adolescents can cope with their divorce.

In a study of adults whose parents divorced in their childhood, the majority of the participants described their parents’ decision to divorce after 20 years as an appropriate decision. So it’s not the divorce itself that negatively affects the child; factors such as the age, gender, temperament of the child, the conflict or agreement of the separation, and the relationship between parents and their children.

- After a divorce become final, the process and the solutions to the difficulties should be explained to the child or adolescent. At the same time of the statement, both parents should be present and the statements should not be incriminating.

- In order to prevent the child from refreshing his negative memory on the same days every year, important days such as New Year’s Day and birthday should be avoided to announce the divorce decision.

- It should be clearly stated that divorce is definitely not related to them and they should be told that they will not lose one of their parents, and they should be guaranteed that they will always be loved and their needs will be met.

- After divorce, parents should not blame each other against their children and use their children to make peace to justify themselves.

- The custodial parents should not use this situation as a means of revenge, or confront the child or adolescent against the other parent. As a result of this approach, it is not one of the parents but the child or adolescent who is punished.

- Parents should not compete in fulfilling every request to prove to each other, their children and the community that they are good parents. This can have permanent negative effects on the child’s personality development and lay the groundwork for them to use this situation.

- When communicating with the child or adolescent, using expressions such as “Are you not your mother’s daughter? Such an emotional burden should not be made against adolescents.

- Avoid this protective and guardian behavior due to divorce. This situation causes the passive personality structure of adolescence.

- The adolescent should see both of their parents frequently, but must have a home where the child lives and calls it ‘my home’. Adolescents fulfill their self-perception and self-confidence, which is reduced due to divorce, through regular and routine interviews rather than seeing their parents frequently.

- Except for mandatory situations after divorce, the adolescent’s home and school should not be changed.

- Throughout the whole process, parents should remember that they are responsible for the best interests of the child and that it is a great injustice to the child reflecting on their relationship.

- Parents should not turn away from professional support and cooperation.

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Abstract. The fourth generation rights, which include somatic rights, evoke several controversies. One of the rights is considered human right to organ and tissue transplantation. Issues of investigation of crimes in this sphere are discussed in the article. The author notes that there are a number of problems, including moral and legal ones, in the investigation of these acts. It is necessary to develop high technologies that will improve the level of medical knowledge of crime investigators, as well as, introduce a system of independent examination to solve most of the legal and forensic problems; otherwise, there is a high probability of abuse, both by doctors and by criminal groups.

Keywords: transplantation, human rights, investigation, organs' transplantation, clinical approach, medical error.

When investigating medical crimes in such a specific area as transplantology, the theoretical and practical recommendations developed by criminalistics, forensic medicine and the practice of investigating certain types of crimes are quite applicable. Until now, works of criminalist-scientists and forensic doctors Y.P. Ishchenko, M.M. Yakovlev, O.A. Kustova, N.S. Karpov, Y.D. Sergeev, S.V. Yerofeev, etc. have been devoted to methods of investigating crimes in general and, in particular, medical crimes.

One of the most developed systems of general and private methods is the system of methods of preliminary investigation in criminal cases. It consists of:

- 1) Methods for solving typical investigative problems arising in cases of various categories;
- 2) Methods of investigation of certain groups of forensically similar types of crimes
- 3) Methods of investigation of certain types and varieties of crimes [1].

One of the initial investigative actions in cases of medical crimes under Art. 133 of the Criminal Code, which provides for liability for the illegal removal of human organs or tissues, is an examination of the scene of the incident, the corpse of a deceased patient, of medical documentation (patient record) and the seizure of this documentation.

External examination of the corpse at the place of its detection is carried out by the criminal prosecution body (investigator) with the participation of a forensic medical expert, and in the absence of such, with the participation of another doctor. Here the question arises: who is a forensic expert, which department does he report to, what are his competences, rights and obligations?

An analysis of the investigative practice shows that neither an employee of the criminal prosecution body (interrogator, investigator) nor a forensic expert go to the scene of the incident (to medical institutions), examine the corpse and medical documentation, and they do not take measures for collection and consolidation of evidences. This also happens because the administration of the medical institution does not notify the investigating bodies about the death of patients and does not incur liability for cover-up of these crimes.

Article 241 of the Criminal Code of the Republic of Uzbekistan speaks of responsibility only for the concealment, which was not promised in advance, of a grave or especially grave crime; but medical crimes, even with grave consequences, do not belong to these categories of crimes.

On the contrary, without waiting for the results of the investigation of the criminal case, the heads of hospitals always take the position that the doctor is not guilty of the death of the patient on the day of his death or on the second day. Therefore, medical crimes are mostly disclosed because of patient's complaint or, in the event of their death, by their relatives.

Meanwhile, according to the information of the Ministry of Internal Affairs of Kazakhstan, an organized criminal group in the field of human organ transplantation operated in the territory of the republic in 2017-2018. Uzbeks, Kyrgyzs and Ukrainians in need of money gave their kidneys.

So, in Kazakhstan, police officers arrested A. Donbai, the chief doctor of the City Clinical Hospital No. 1 of the city of Shymkent, and held him criminally responsible for 2 articles of Criminal Code of

Kazakhstan: participation in a transnational criminal group and illegal removal of human organs [2].

During the pre-trial investigation, it was found that they attracted citizens of Uzbekistan, Kyrgyzstan and Ukraine as donors, who had to sell their kidneys due to their difficult financial situation. The recipients were well-off people from the far abroad, mainly Israel.

There is now an activation of cases in this field. In this connection, Prof. Y.P. Ishchenko notes that “there are the growth of crime, especially organized crime, the more frequent events of illegal influence on witnesses and victims by the guilty persons and their connections, difficulties in the material and technical support for law enforcement agencies against the background of the active use of the latest achievements of scientific and technological progress by criminal elements. they put before scientists and legislators the question of the need to protect the interests of law-abiding citizens through the use of non-traditional means of obtaining forensically significant information during the investigation of crimes” [3].

Ukrainian scholars N. Karpov and Ye. Aleksandrenko also write about it. They note, “In modern conditions of combating crime, counteraction to the disclosure and investigation of crimes has become widespread and endangers seriously to the proper performance of state’s law enforcement functions. Insufficiently effective and timely overcoming of that counteraction is one of the main reasons for the deterioration of the performance of law enforcement agencies. A fairly high level of latent crime, a significant number of undetected crimes, among other reasons, is also explained by the successful counteraction of the criminal environment to the activities of law enforcement agencies” [4].

Favorable conditions for counteracting the investigation of these medical crimes are created because, as already noted, the investigators do not go to the scene of the incident, the medical documentation is not seized, as a result, it makes possible for the suspects to falsify it and enter unreliable information into this documentation. The suspects in these cases are not detained, arrested, interrogated. They are not caught in a crime “while the scent is still hot”.

The investigation, in most cases, ends with a known result: forensic experts give a conclusion that the doctor is not guilty, and the case is terminated due to the absence of an event or *corpus delicti*, without carrying out any investigative actions to expose guilty persons. Criminal cases are initiated with a great delay based on victims’ complaints, and not according to reports from the administration of the hospital where the patient died.

Some of the guidelines developed by O.A. Kustova, are applicable in the investigation of medical crimes against the life and health of patients. When investigating such crimes, a number of basic circumstances are subject to proof:

a) Event of crime.

The time of the crime - it can be any time of the day, depending on the circumstances. Most often this happens at night, when the duty personnel remains uncontrolled and can accept an illegal patient, or act with a patient who is legally in the hospital as he pleases, or even with no worry take him out to the place designated for the transplant operation.

Crime scene – as a rule, medical institution.

Methods of direct perpetration - actions aimed at transplantation (weaning) of internal organs and tissues, leading to death; turning off the devices that temporarily support the functions of the human body, again at night, uncontrollably and without witnesses; signing of the relevant medical working documents and protocols.

Methods of cover-up – forging signatures regarding a voluntary permission for organ and tissue transplantation; destruction of documents that based on the appropriate surgical procedures were carried out.

b) The culpability of person in the commission of a crime – deliberately, with express malice.

c) The nature and amount of damage caused by the crime – damage to property, physical and moral damage, the amount that the court establishes.

Well-established interaction and cooperation between all law enforcement agencies, removal of artificially created barriers to information exchange and overcoming interdepartmental disunity are necessary for effectively investigation of such crimes, as, indeed, any other category of crimes.

It is specific to the investigation of medical crimes that the criminal prosecution officer (investigator) must be in permanent contact with a medical specialist at all stages of the preliminary investigation. But, this is not always possible if we take into account the corporate solidarity of medical workers, their unwillingness to admit, analyze and correct medical errors and provide assistance to judicial power to bring the guilty to justice.

In many cases, surgeons deceive in order to persuade the patient and his relatives to an expensive and deadly organ transplant operation, introducing them at huge costs. This fact confirms the reluctance of medical workers to admit and correct their mistakes, as well as to cooperate with the investigation. In addition, what will be its result – they do not care, since their income comes from the profit from the transplantation of illegally obtained organs.

This is a criminally thoughtless and absolutely unacceptable attitude to one's work and its results.

Understanding the legal consequences of the death of a patient due to ill-considered, unjustified surgical intervention, abroad doctors refuse operations for illegal organ transplantation [5]. However, doctors in our republic do not feel any legal consequences due to the death of a patient as a result of a "successful" operation, since the level of legal awareness of the population and doctors, in general, as well as the low level of medical knowledge of investigators leads to irresponsibility

M.M. Yakovlev brings an approximate list of questions that are put before the accused in cases of medical crimes:

1. Has the accused diagnosed the patient correctly?
2. Has the patient been examined in full in the conditions of a medical institution?
3. Was the patient's treatment consistent with the established diagnosis?
4. Was the treatment applied to this patient contra-indicated?
- 5) Were alternative treatments possible?
- 6) Was the patient's post-surgical care and treatment performed correctly? [6]

Moreover, one more question is asked for:

Has the patient been informed about the mortal danger of the proposed surgical intervention, has there been a written agreement between the patient and the medical institution indicating the rights, obligations and responsibilities of the parties for non-compliance with the terms of the agreement?

Considering the concrete circumstances of the case, these and other methodological recommendations should be taken into account in the investigation of criminal cases on medical crimes in the field of illegal transplantation.

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DEVELOPMENT OF THE NATURAL CADASTRAL SYSTEM OF UZBEKISTAN IN THE CONTEXT OF TRANSITION TO A “GREEN” ECONOMY

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Annotation: The article analyzes the legal foundations of the formation of a “green” economy in Uzbekistan and the development trends of the natural resource cadastral system and reveals the main results of reforming the management system of natural resource cadastral activities. At the same time, the influence of the “green” economy on the formation of the natural resource cadastral system was assessed and the need for legal regulation in the draft Environmental Code of the concept of “natural capital” was substantiated. In addition, the author identified the problems of the current domestic natural resource cadastral system and characterized the patterns of further improvement of legislation on the natural resource cadastral system.

Keywords: “green” economy, environmental investments, innovation, natural capital, environmental indicators, greening the economy, cadastres of natural resources

At the 40th world economic forum in 2010, held in Davos under the slogan “Improve the state of the planet: rethink, re-plan, rebuild the world”, a new global course on the “green” economy was announced as the only way to further development. This course has also been implemented by Uzbekistan, whose primary task at this stage of development is to further improve its legal framework.

В теории выделяют три основные аксиомы «зеленой» экономики:

1. it is impossible to expand the sphere of influence indefinitely in a limited space;
2. it is impossible to demand the satisfaction of infinitely growing needs in conditions of limited resources;
3. everything on the surface of the Earth is interconnected [1].

In 2011, UNEP defined the “green” economy as a low-carbon, resource-efficient economy that leads to improved human well-being and social justice, while significantly reducing environmental risks and preventing the loss of biodiversity. Among the bright supporters of the “green” economy, one can distinguish M. Bookchin [2], R. Kostants [2], D. Meadows[4] and others, who speak of “green” technologies as the foundations of the “green” economy, working not with the consequences, but with the causes of environmental problems, radically changing the approach, products and, importantly, the consumer behavior of the state to natural resources.

Uzbekistan is now striving to achieve a balance between economic growth and environmental protection. This is reflected in the introduction of environmentally friendly, energy - and water-saving technologies. Political scientist and orientalist Dmitry Verkhoturov believes that the changes associated with the introduction of a “green” economy will be very serious and will affect all spheres of the uzbek economy and society. According to him, the economy should develop in a way that does not undermine the natural environment, because this can lead to disaster. [5]

Usually, the “green” economy is more associated with innovative technologies and the widespread use of renewable energy sources (solar, wind, biofuels, etc.), but given the lack of the necessary legal framework for the use of “green” technologies, the increase in the cost of construction and design of such facilities, the long payback period for “green” projects, the need for non-renewable natural resources will still dominate economic development. Therefore, rational consumption of natural resources through technological modernization and development of financial mechanisms is the main task of the transition to a “green” economy, which is enshrined in the concept document – STRATEGY for the transition of the Republic of Uzbekistan to a “green” economy for the period 2019 — by 2030, the main goal of which is to achieve sustainable economic progress that contributes to social development, reducing greenhouse gas emissions, climate and environmental sustainability, through the integration of the principles of the “green” economy in the ongoing structural reforms. [5] In addition, it is planned to implement such tasks as:

inclusion of “green” criteria based on advanced international standards in priority areas of public investment and expenditure;

assistance in the implementation of pilot projects in the areas of transition to a “green” economy through the development of state incentive mechanisms, public-private partnerships and enhanced cooperation with international financial institutions;

development of the system of training and retraining of personnel related to the labor market in the “green” economy by stimulating investment in education, strengthening cooperation with leading foreign educational institutions and research centers;

taking measures to mitigate the negative impact of the environmental crisis in the Aral sea region;

strengthening international cooperation in the field of “green” economy, including through the conclusion of bilateral and multilateral agreements.

The implementation of these and other tasks for the transition to a “green” economy primarily involves improving the information resource of environmental relations, in particular, in the use of natural resources. This factor, in our opinion, is called to play a dominant role in solving the issues of rational use of natural resources through technological modernization and development of financial mechanisms, since the basis of any activity is statistics and the more reliable the statistics, the more effective the activities carried out.

Like any sphere of economic progress at the stage of transition to a “green” economy, the sphere of natural resource management as an integral part of the information resource of environmental policy is undergoing changes caused by the attitude of the state and society to natural resources as the main source of economic development. These changes are reflected in the peculiarities of the development of the sphere and in our opinion, we can highlight the main points:

first, the process of reforming the administration in the cadastral sphere as a whole has begun. On the basis of the State Committee of the Republic of Uzbekistan on Land Resources, Geodesy, Cartography and State Cadastre, the Cadastre Agency under the State Tax Committee of the Republic of Uzbekistan was established. The main tasks of this Agency are to ensure the implementation of a unified state policy in the field of state cadastre management; coordination of activities of state administration bodies and local public authorities in the field of state cadaster management; maintaining a Unified system of state cadasters, ensuring effective management of the state cadaster of territories, the state land cadaster; implementation of effective cadastral supervision aimed at ensuring compliance with the procedures for maintaining state cadasters:

secondly, the active involvement of innovative technologies in the cadastral sphere has begun. In particular, all information about the type, contours, borders and rights holders of land is entered in the online geoportal of the cadaster Agency, which is integrated with the National geoinformational system. The land balance and its reporting, as well as the notebook of the district (city) land Cadaster, are maintained exclusively in the National GeoInformational System. In addition, the unified system of state cadasters is formed in the National geoinformational system and the corresponding data of state cadasters are submitted to the National geoinformational system exclusively via telecommunications networks directly. In addition, all agricultural maps will be entered in the online geoportal and integrated with the National geoinformational system.

third, the process of establishing public-private partnership in the cadastral sphere is gaining momentum. In particular, began attracting businesses to perform work on the evaluation of soil, determination of the normative value of agricultural land and conducting geobotanical studies, and preparation of cadastral cases is now done by the engineers inventory, certified by the Agency for cadaster and organizations Agency for cadaster on contractual basis.

fourth, the differentiation of the definition of the normative value of land. The normative value of agricultural land will now be determined by the Ministry of agriculture, while the normative value of non-agricultural land is determined by the State Committee of the Republic of Uzbekistan on land resources, geodesy, cartography and state cadaster.

Based on these features of development, we consider it appropriate to highlight the following problems of the modern natural cadaster system of Uzbekistan:

first, the one-sidedness of the measures taken to further improve the inventories of natural resources. The main changes in this area so far affect only the state land cadastre as the basic cadastre, while other natural resources cadastres (state water cadastre, state forest cadastre, state cadastre of objects of animal and plant worlds, state cadastre of deposits, manifestations of minerals and man-made mineral formations, state cadastre of protected natural territories) are unfairly left without due attention

from the state. It would be foolish to say which natural resource is more important for a person: land, atmospheric air, water, or flora and fauna? We must not forget that all natural resources are components of a single natural environment, they are interconnected and interdependent. Therefore, improving the legal regulation of the state of qualitative and quantitative indicators of the state of natural resources should affect all natural resources equally, because the state of one resource affects the state of another, thereby forming a systematic approach to this issue;

secondly, the widespread use of monitoring results takes the importance of cadasters into the background. This is due to the attention we pay to monitoring. Noting the fact that the information obtained in the monitoring process, which includes observation, analysis and forecast of the state of natural resources and the environment, is priceless and requires a lot of effort and labor, I would like to note a certain inconsistency and unreliability of the monitoring results, which is recognized by experts themselves [7], because monitoring data require further systematization and constant updating by fixing the dynamics of changes in the main indicators of natural resources. The priority development of monitoring is also evidenced by the implementation of international projects in this area, in particular, the Joint Project of the Government of the Republic of Uzbekistan and the United Nations Development Program “Environmental Indicators for Monitoring the Environment in Uzbekistan”, implemented in the period from 2004-2007, which is the main goals of the unified ecological system proclaimed the increase in the efficiency of state monitoring as the main goal of the unified ecological system. [8] In addition, the updating of environmental monitoring programs in Uzbekistan every 5 years also shows the importance of monitoring as the main tool of an information resource;

thirdly, the process of attracting international financial institutions to implement investment projects in the field of natural resource inventories is limited. In particular, there is currently only one project under the grant funds of the international Fund of the Republic of Korea “KOISA” to create a unified automated system of multi-purpose land data — yergeoportal.uz. The lack of sources of financing for natural resources activities in relation to other natural resources makes it difficult to attract innovative technologies to the natural resources sector.

To solve these and other problems of the natural resource sector, it is necessary first of all to radically change the attitude to natural resources by recognizing not only raw materials, but also ecosystem, recreational, and cultural properties of natural goods, which can be achieved by legal regulation of the concept of “natural capital” and “environmental indicators”. These concepts will help to form a truly careful attitude to natural resources in the public consciousness and fully include elements of qualitative and quantitative indicators of natural resources. The “green” economy values and invests in natural capital, and the only source from which we can get systematic and updated information about the state of natural resources and track the dynamics of changes is the inventory of natural resources.

These and other imperfect aspects require further improvement of environmental legislation. Based on this, we consider it appropriate:

1. Introduce the concepts of “natural capital” into the project Environmental Code and state them in the following wording: “natural capital is a set of ecosystems that support normal human life and the resources provided by them, which have raw materials, cultural, recreational and other properties necessary for human viability»;

“Environmental indicators are a piece of information about an ecosystem that is used to study its state and to study the impact of human activities on this ecosystem»;

2. Adopt the law “On Cadasters of Natural Resources”, which provides for the following chapters: “General provisions”, “Management in the field of cadasters of natural resources”, “Procedure for updating information on cadasters of natural resources in the National GeoInformational System”, “Rights and obligations of individuals and legal entities in the field of cadasters of natural Resources”, “State Land Cadaster”, “State Water Cadaster”, “State Forest Cadaster”, “State Cadaster of Deposits, mineral manifestations and Technogenic mineral formations», “State cadaster of plant world objects”, “State cadaster of animal world objects”, “Economic mechanism of activity in the field of natural resources cadasters”, “Procedure for providing cadastral information”, “Cadastral assessment of natural resources”, “Cadastral supervision”, “Legal liability for violation of legislation in the field of natural resources cadasters”, “International cooperation in the use of natural resources”.

3. Adopt the law “On environmental insurance”, which provides for property protection of the legitimate interests of individuals and (or) legal entities (insured) in the event of civil liability for

obligations arising from harm to life, health, property of third parties and (or) the environment as a result of its accidental pollution, as well as insurance against losses of environmental investment;

4. Adopt the law “On Greening the Economy”, which provides for improving the information resource in the field of ecology, regulating the legal status of the market in the environmental sphere, revising the mechanism for evaluating natural resources, regulating such basic institutions as environmental and economic analysis, environmental audit, forecasting and planning of environmental management, environmental leasing, environmental management, payment for environmental management;

5. Create a single information platform for the environmental and investment space within the National geoinformational system, which includes information about ongoing and upcoming investment projects in the field of natural resources cadasters.

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TECHNOLOGICAL SCIENCES

ARCHITECTURE IN TRANSOXANIA

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The region comprising Turkistan, Khwarazm and Khurasan has preserved a rich architectural heritage dating from the sixteenth to the early nineteenth century. Having absorbed the considerable achievements of the Timurid era, architecture flourished at the beginning of the period but went into a decline in the eighteenth century, only to bloom once more in modern times. Common trends and local differences were exhibited throughout the region, making it possible to offer a connected description of the architecture and decorative treatment of buildings within these large territories. As in earlier days, the construction of monumental buildings was seen as a matter of prestige, emphasizing the power of the ruling dynasty, representatives of leading families and senior clergy. Such buildings still belonged to the same categories: secular architecture, such as palaces and residences; civic architecture, such as trading edifices, baths, ribat⁻s (caravanserais), bridges and sardaba⁻s (reservoirs); and religious architecture, such as mosques, madrasas (colleges for higher instruction in the religious and other sciences), khanaq⁻ah⁻s (hospices; dervish convents) and memorial complexes usually at the burial places of members of the Muslim clergy.

Urban planning activity was limited in most towns to the renovation of forti-fied walls (for instance, there was substantial fortification work in Bukhara in the sixteenth century and in Khiva in the late eighteenth century) and the construction of main thoroughfares and public and religious centres. However, there were no major innovations in the towns, and new building work continued in accordance with the earlier traditions. The external appearance of towns was largely determined by their fortifications, which even from a distance looked forbidding. The walls were flanked at regular distances by semicircular towers. The entrances to a town were marked by solid darwaza⁻s (gates), the number of which corresponded to the number of significant trading and strategic routes leading to the town. The gate was usually of monumental construction with a high vault, flanked by two mighty towers and with a lookout gallery above. Its massive doors were locked at night and in troubled times; most town gateways had a drawbridge thrown across a ditch. Behind the doors lay an entrance hall where guards were stationed and which gave directly on to the built-up main street. The walls surrounding the towns were punctuated by towers placed between the impressive gateways. Behind the walls, portals, domes, monumental buildings and minarets rose skywards. Along the main streets there were rows of shops and stalls specializing in different kinds of goods and often skilled craft workers had their workshops there. The most important covered markets were known as taq⁻s, t⁻ims, baz⁻ar⁻s (shopping arcades or passages) and chars⁻u⁻s (lit. 'four directions', i.e. crossroads, and thus, buildings at the intersection of two streets), many of which are still in use today. (See the section on market buildings below.) In big cities there was an administrative and government hub, usually inherited from previous eras but containing new buildings. Such citadels include the Qal⁻ca in Samarkand, the Ikhtiyaru'dd⁻in fortress in Herat and the Ark¹ of Bukhara. They contained the government palace, chancellery, treasury, arsenal and jail for high-ranking prisoners. However, the rulers and members of the ruling dynasty lived their private lives in their own personal palaces and out-of-town residences. An important part in the formation of towns was played by public centres of activity, widening out at intervals along the main thoroughfares or else situated in specially designated parts of the town or on its outskirts. Such centres comprised a maydan⁻ (open square) surrounded by large buildings used for civil or religious purposes. Most of the space inside towns was taken up by built-up residential quarters (mahalls). Their historically formed contours were irregular, encompassing

private properties, separated by blind fences, narrow alleyways and impasses. Residential and service buildings in such areas were built around a small interior courtyard, sometimes with two or three fruit trees and vines, and varied according to the size of the plot and the owner's rank.

Although the public buildings and architectural aesthetics of the sixteenth and seventeenth centuries followed on from those of the Timurid era, the period was marked by the further development of architectural design. Building materials remained the same as before – clay for ordinary buildings (pisé, or sun-dried brick and mortar), and baked bricks with gach (gypsum) mortar for monumental architecture. Both categories of buildings had beamed and arched and domed ceilings – the latter exhibited several interesting innovations. Particularly remarkable was the development of complex domes and systems of vaults and arches filling the space beneath. Tiling (glazed brick, majolica and decorative carved mosaics), carved gypsum, and wood and occasionally stone fretwork were used for architectural decor, as they had been earlier; the interiors also contained carved gypsum as well as ornamental painting. The ornamentation featured multiform geometric, epigraphic and stylized vegetal motifs. In the latter half of the sixteenth century there was a trend towards lowercost building methods. Thus walls were often not solid but made of 'camouflage brickwork': two rows of baked brick filled in with rubble taken from building sites together with a filler-binder mortar. Large painted (dark blue, sky blue, black and white) and glazed revetment slabs were used for decorating purposes instead of labour-intensive polychrome mosaics. Interiors of the period were mostly ornamented with a bichrome incrustation of chaspak (carved gypsum).

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