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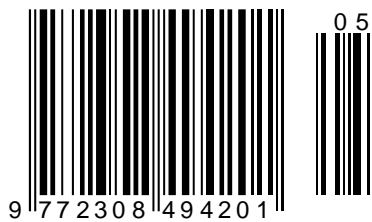# International Scientific Journal

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FOLK PROVERBS IN "MASNAVI" AND THEIR EXPRESSION IN UZBEK TRANSLATION

Abstract: Given article is dedicated to the translation problems of the folk proverbs included in "Masnavi" written by Jaloliddin Rumy. The purpose of the proverbs in a sense is to encourage people to understand themselves and to think of every step they take to lead a beautiful life. In this world, man does not live without wisdom, and man seeks what he needs. Good-hearted people with good intentions will be able to live only for the goodness.
Key words: Masnavii manaviy, ghazals, ruboi, hadith, the miracle of the language, tavsir.
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Introduction

To inform the reader of the mystery of God and truth, warning of the essence of the world and life and expressing it in the form of poetry or prose plays a leading role in the classical literature of the East. The literary activity of Mavlono Jaloliddin Rumy, who became the common genius of the Turkic and Persian peoples because of his eternal spiritual heritage, especially, the great poet's "Masnavii manaviy" proves that he is a leading figure in the wisdom. The fact that the works of the great poet have been repeatedly translated by Uzbek translators is also evidence of the close proximity of Rumy's genius to the spiritual world of our people.

Artistic activity and creativity are an honor because they provide the writer's happiness in both worlds. Therefore, not everyone can receive this blessing. In the process of creating a masterpiece, along with being aware of other sources, the people deeply study folklore. Furthermore, the writer not only learns but also uses his own life-long experience for conveying this particular purpose to his readers. This provides the elegance, attractiveness and charm of his works. The reader keeps in his memory in a single reading, or he may change his heart. The owner of such works is the great thinker Mavlono Jaloliddin Rumy. Not only did the poet enjoy the sources of his thoughts, the works of scholars, but also he read them,

considered on them, and enriched his creativity. Observations show that Rumy skillfully used folk tales, proverbs, and used them in his ghazals, ruboi, and it may not be wrong if we say that he uses such things in "Masnavi manaviy" to prove his point. By this way, he was able to develop and enrich literature, to express the people's pain and encourage them to do good deeds. That is the purpose of literature and fiction. Translator scientist Gaybulla Salomov says, "Speech without proverbs is Food without salt" and comments: "Proverb is a product of popular wisdom, its judgment, a combination of centuries-old experiences, and its response to various life events. The proverb is born in the course of daily life, in the process of communicating with each other. Proverbs are the property of the people. The grief of the proverb is the people's grief, the fury of the proverb is the people's anger, the laughter of the proverb is the laughter of people, and the proverb's irony is people's irony. Every nation in the world use proverbs and all languages contain proverbs. "There is no nation without language in the world, and there is no language without proverbs", says Tatar writer Nakiy Esanbat.

There are proverbs that suggest the "sweet" advice, teaching the mind, and encourage the courage and boldness; it tells your "bitter" fault to the face, gives a lesson to bribers, accusations, liars, thieves,

losers, hypocrites, flatterers, cheaters, crooks, and teaches with bitter irony"[1]. Literary critic G. Salomov emphasizes the truth, and in the course of studying the "Masnavi" related to the subject, Jaloliddin Rumy skillfully used national proverbs to convey the essence of each story to the reader.

Today is a time when the people's hopes and dreams come true. But the proper use of the wisdom of ancestors is the wise decision of every human being. On this purpose, we have explored and compared the original and Uzbek translations of the national proverbs used in Jaloliddin Rumy's work "Masnavi manaviy". Certainly, thanks to independence, a well-known Uzbek poet, talented translator Jamal Kamal, has translated this work into Uzbek. However, even today other translators are continuing this good work. According to some sources, Askar Mahkam translated only a few lines of Masnavi's first copy, while translator Vazira Shodieva intended to translate the "Nainoma" part of the work, the poet Suleiman Rahman decided to translate completely. We mainly used translations of Jamal Kamal and in some cases translations of Askar Mahkam and Odil Ikrom in this article.

The miracle of the language. There are many ways of creating artistic miracles in folklore. Well-known literary critic scholar Gaibulla Salomov thought about some of the means in this regard and said: If I were asked whether there would be miracles in the language, I would answer that the miracle of the language – proverbs, sayings, and idioms in it. Indeed, the essence of the word, the sweetness of the word is proverb and saying which gives a great meaning"[2]. In fact, the miracles of the language of every nation are the examples of folklore, proverbs and idioms that have been tested for years in that language.

The language of the people is rich, learning and the use of language resources in place, will surely bring great success to every author. One of the most well-known literary and elite monuments of the world, which was created with the great use of this rich resource, is the "Masnavii manaviy" a pamphlet, written by Mavlono Jaloliddin Rumy.

To consider original version of "Masnavi" and the use of some proverbs in its Uzbek translation versions done by the translators as Jamal Kamal, Askar Mahkam, Odil Ikrom, Vazira Shodieva, and Sulaiman Rahmon clarifies the significant artistic features of the translators. There are various alternatives to the proverbs used by translators, such as: "Izlaganga tole yor", "Qidirgan Makkani topadi". From the linguistic point of view, we are not mistaken if we say that there equivalents. For instance, proverbs such as "Oyning o'n beshi qorong'u bo'lsa, o'n beshi

yorug'dir", "Botar kunning otar tongi bor", "Bir achchiqning bir chuchugi ham bor", "Bugun yupun – ertaga butun", "Toy mingan ot ham minib qoladi", "Eshakli otli ham bo'lar", "O'char chiroq yana yonar" can be met in the same meaning. We can observe that proverbs as "Ahmoqqa javob – sukut" or "Sukut alomati – rizo", "Bitta qinga ikkita pichoq sig'maydi", "Ikki qo'chqorning boshi bir qozonda qaynamas", "Baliq boshidan sasir" yoki "Baliq boshidan sasiydi", "Yomon baliq suv loyqatar", "Qars ikki qo'ldan chiqadi", "Yolg'iz qo'ldan tovush chiqmas", "Arpa ekkan arpa olar, bug'doy ekkan – bug'doy", "Arpa ekib, bug'doy kutma", "Nima eksang, shuni o'rasan", "Birovga chuqur qazisang, unga o'zing tushasan", "Nodonga ulfat bo'lgan qon yutar", "Qadr qilsang, qadr topasan" or "Hurmat qilsang, hurmat ko'rasan" have been used in different places for various reasons.

Although Persian and Tajik are not members of the same language family, they are very close to each other in the dictionary. Translator Gaybulla Salomov wrote the followings about this: "The inaccessibility and "proximity" of languages are at times as close and sometimes even incompatible with the languages spoken by these languages. For example, the lands of Uzbeks, Kazakhs, Kyrgyz, and Turkmen are adjacent to the Turkic language family. However, another Tajik nation in Central Asia, the language of the Tajiks, who have lived together for centuries, created a shared culture, history and literature, belongs to the Iranian Indo-European language. Nevertheless, there are many similarities between the Tajiks and Uzbeks in the dictionary.

The scientist said, "The following units starting with the letter "a" and their equivalent Uzbek versions of the phrase "Farhangi iborahoi rexta" published in Tajik should be drawn attention.

After that:

Az no'gi xamir fatir – xamir uchidan fatir; az sarat monad – boshingdan qolsin; abjaqi kasero barovardan – birovning abjag'ini chiqarmoq; avzoyash bejo – avzoyi bejo (avzoyi buzuq); avj giriftan – avj olmoq; adabi kasero dodan – birovning adabini bermoq; adabi xudro xo'rdan – adabini yemoq; azobi go'r – go'r azobi; alam kashidan – alam chekmoq[3] and others are considered such examples. The translator also added, "From the Tajik and Uzbek dictionaries, the phraseological and idiomatic, it is possible to bring together thousands of common, alternative expressions. The customs, rituals, and similarities of these two nations are rich in similarities, and their written literature, especially poetry, has many traditions. However, in terms of grammatical construction, Uzbek and Tajik languages are far from each other"[4].

[1]Salomov G`. Til va tarjima.–Tashkent: Fan, 1966. – 256 p.
[2]Salomov G`. Rus tilidan o`zbekcha maqol, matal va idiomalarni tarjima qilishga doir. –Tashkent: Fan, 1962. – P.3.

[3] Salomov G`.Tarjima nazariyasiga kirish. – Tashkent:"O`qituvchi",1978. – P.66 – 67.
[4] Ibid: – P. 67.

For instance, in "Na six kuysin, na kabob" the word "so`zad" was translated into the Uzbek version of "kuysin", which is one of the few examples that show how lexically these two languages close to each other. Tadjik alternative of this proverb is "Na sikh suzad, na kabob". Vaqte dar kore, naf'i har du taraf dar nazar girifta shavad, in maqolro mego'yand (p, 361)". "Na six kuysin, na kabob". This proverb is used to express the benefits of the two sides.

There are some educating tips for not hurting anyone, not hurting your heart, giving others what you wish to yourself, and following your promise. Do this in a way that does not hurt you or anyone else. Our wise people have said, "My son, I want you to be a man, not a scientist".

We know that there is a hadith that says, "You cannot be a true muslim until you see what you have done to others". A person should not benefit in any case at the expense of others. However, alas, there are people around us who are always there for their own good. Living at the expense of someone else has become a daily habit. He does not keep his promise; he is always looking for good. Our wise nation address these dirty, lowly people and say, "Always do this so that no one will be offended". That is to say, "Everything must be treated equally, so that you can live in peace and prosperity, otherwise you will be unhappy in both worlds". In the process of telling each story in "Masnavi", the author appears as a thinker or orif. It is as if you could talk to the poet freely and find the answers to every question. The story of "how a trader told his parrot how he met Indian parrots" was also written in this way and tells the reader to be friendly and understand each other convinces that human should never be indifferent to human when in difficult times. Because man is the flower of life.

Let us consider another proverb "Izlaganga tole yor", "Чo'yanda yobanda ast" persian alternative of "Qidirgan Makkani topadi" is "Jo'yanda yobanda ast".

In his work, the author of "Masnavi" gives a glimpse of the many events related to the life of the Prophet (s.a.v.). One of such literary stories is "the story of the ambassador of the Rome Amir al-Mu'minin's coming to see Umar raziyallohu anhu and seeing his miracle". As it has been narrated that the ambassador of Caesar came in search of Umar. He asked people the place of the castle of Umar. Then people said there was no castle of his. The ambassador was surprised and continued to look for the Khaleefah. Finally, when he heard the descriptions of Umar (r.a.) from people, there develops a great love for him in his heart. "Has the world ever seen such a person?" – Love in the soul wins and the ambassador continues to search. The dream to become a servant to him was rooted in his heart. And he comforted himself that he would find what he was looking for. Immediately following the belief in this truth, he met a woman on the road and she reported that the Caliph was sitting under a palm tree. The author of "The Masnavi", who poetically interpreted this amazing adventure, wrote: "Whoever searches for the world will find and achieve it". The poet used the well-known Persian proverb "Jo'yanda yobanda ast" to confirm his conclusion and made an impressive statement.

There are alternatives to the proverb in the Uzbek language, such as "Qidirgan topadi", "Izlagan topar", "Izlaganga tole yor" Jamal Kamal uses the proverb in the Uzbek translation as "Izlagan topgay", which is exactly what the interpretation is. Now let us compare:

In the original:
Just o'ro, to-sh chun banda buvad,
Lojaram jo'yanda yobanda buvad [5].
Translation version by Jamol Kamol:
Koshki qul bo'lsam Umarga, derdi ul,
Izlagan topgay, degan gap to'g'ridur[6].
Translation version by Odil Ikrom:
Izlamish toki bo'lay deb unga qul,
Shubhasiz, axtarsakim, topguvchi ul.

The Masnavi is full of stories about various layers of social life and the lives of various professions. One of them is included in the third book, "A snake-hunter who brought a frozen dragon in Baghdad thinking it to be dead in the cold". This story also shows that human beings can do anything that is difficult to accomplish through action. However, such deeds and pursuit of purpose can lead either to success, or to failure or destruction. After all, woe to a man who stubbornly devotes himself to something that might be a threat, just as the wise and the wise have the good results. Moreover, the actions of such an ignorant person can only cause serious harm to himself and others. The snake-hunter's disobedience also has its effect: the frozen and deadly dragon revived by the heat of the day, and ate both visitors and the snake hunter. "Yes", the poet concludes, "just as a good man strives for good and achieves good results, it is inevitable that a bad person will follow a foolish purpose". At the beginning of this story, the story of the Roman Ambassador's adventure we discussed above in the first book is quoted as saying "Jo'yanda yobanda ast". However, the actions of the snake-hunter, as we have observed in a brief note, indicate that this article does not mean for the purpose, that is, to pursue what is good, but that everyone will get what he sows.

The translation of the lines is very fluent, with the original content and form being well-kept. It

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[5]Mavlono Jaloluddin Muhammadi Balkhi. Masnavi. Daftari avval. – Tehran: "Nashri Zamon", 2001. – Sah.52 (Poems included into the article are taken from this source).

[6]Mavlono Jaloluddin Rumyy. Masnavii ma'naviy. Forsiydan Jamol Kamol tarjimasi. Birinchi kitob. – Tashkent: Abdulla Qodiriy nomidagi xalq merosi nashriyoti, 2005. – B.136.

means that the translator has a clear understanding of the author's intent. Compare:

In the original:
Gar garonu gar shitobanda buvad,
On ki jo'yandast, yobandabuvad [7].
Uzbek translation:
Garchi sust yurguvchi, gar chopguvchidir
Izlagan kimsa magar topguvchidir [8].

The author of "Masnavi" has repeatedly referred to the theme of love, which is a divine miracle. There is no account in the work that even the problem of love was not mentioned directly or indirectly. In a story entitled "A lover's finding his fiancée" he says, "he who seeks goodness, he will get goodness" in the third book of Masnavi. He says, "The shadow of Allah, that is, the one who does not give up, asking from God will achieve his purpose". "Because", says the poet, "the Prophet said, "Keep on knocking the door of pray, and it will be opened to you". In this way the poet again addresses the popular proverb, "Jo'yanda yobanda ast". This time Jamal Kamal correctly understood why the author used the proverb and managed to translate it properly. Compare:

In the original:
Soyai Haq bar sari banda buvad,
Oqibat jo'yanda yobanda buvad[9].
Uzbek Translation:
Soyayi Haq bizga yetgay oqibat,
Izlagan har kimsa topgay oqibat[10].
In the original:
Jiddro boyad, ki jon banda buvad,
Z-onki jid jo'yanda yobanda buvad[11].
Uzbek translation:
Kimsa izlar ersa, chopgaydir magar,
Izlabon, oxirda topgaydir magar[12].

Of course, proverbs did not come about without any reason, but in a sense, they encouraged people to understand themselves and to think of every step they take to lead a beautiful life. In this world man does not live without wisdom, and man seeks what he needs. Of course, those with a clean heart and good intentions will be able to live only for the goodness. That is why, when Rumy said, "Jo'yanda yobanda ast", Jamal Kamal was able to find an alternative and convey it to the reader in the form of "everyone who seeks, gets the result. The teacher should also seek for love, kindness, goodness in his life, and then we will content ourselves and others as well.

Another popular proverb is "Oyning o'n beshi qorong'u bo'lsa, o'n beshi yorug'dir (After rain comes fair weather)" and the persian alternative of this proverb is "Az pasi zulmat base xurshedhost", "Poyoni shabi siyoh, safid ast" But if this proverb is translated literally, it means "Too much sun is after the darkness". Other alternatives in the Uzbek language have the same meaning, such as "There is a dawn after sunset" and "There is also sweet for each bitter".

It is natural for a person who has been suffering spiritually or physically from the anxieties of life may not finding meaning in his life and be discouraged. To those who are in such a state, the world looks dark, and tomorrow looks like a mirage. Also, Mavlono's life was not isolated from difficulties and difficult situations. After all, his youth coincided with the Mongol invasion, and his family had to find shelter in foreign lands and the writer lived far away from his homeland. Another incident that affected Mavlono's spiritual world was the loss of his friend and master, Shams Tabrizi, which was ordeal for him. Mavlono Rumy, who had proved himself in the struggle for this will, repeatedly said in Masnavi that joy comes after grief and relief after hardships. He used "Az pasi zulmat base xurshedhost (Light comes after darkness)" which fits to the meaning of the widespread Uzbek proverb "The fifteen days of month is dark, the fifteen is light" in his story of "Those who were blind of their faults and didn't follow the wise sermon lovers of God. Although this proverb is creatively approached Uzbek in translation, the bayt does not compromise its content and form. The preservation of rhymes "umid" and "khurshid" in this process indicates that the translator was following the author. Compare:

In the original:
Ba'di navmedi base ummedhost,
Az pasi zulmat base xurshedhost[13].
Uzbek translation:
Kelsa ma'yuslik, keyin ummid kelur,
Kecha kechgay, ortidin xurshid kelur[14].
In the original:
Ko'yi navmedi marav, ummedhost,
So'yi toriki marav, xurshedhost[15].
Translation version by Jamol Kamol:
Ko'yi tushkunlikda ummid istama,
So'yi zulmat ichra xurshid istama[16].
Translation version by Odil Ikrom:
Noumid bo'lma, umid bor, tikla bosh,
Bormagin zulmat sari, bordir quyosh[17].

The proverb of "The end of each grief is joy" which is similar in the meaning to the above given has been given in Persian as "Mardi oxirbin muborak bandaest".

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[7] Daftari sevum. – Sah.240.
[8] Uchinchi kitob. –B.91.
[9] Daftari sevum. – Sah.337.
[10] Uchinchi kitob. – B.419.
[11] Daftari panchum. – Sah.478.
[12] Beshinchi kitob. – B.125.
[13] Daftari sevum. – Sah.290.

[14] Uchinchi kitob. – B.258.
[15] Daftari avval. – Sah.34.
[16] Birinchi kitob. – B.29.
[17] "Ular aytdilar:"Biz senga rostdan ham (farzand ko`rishing)xushxabarini keltirdik. Bas, sen noumid kimsalardan bo`lmagin! (Qur'oni karim, "Hijr"surasi, 55-oyat ".

For instance,

Xushbaxt kase ast, ki oqibatandesh boshad.

Chashmi oxirbin tavonad did rost[18].

The proverb is also given in another way among people. If man faces continuous difficulties, grief or misfortune to console him they say the following Persian proverb "Az pai (dar pasi) har girya oxir xandaest (The end of each grief is joy)". We can observe Mavlono's use of the proverb in following bayt:

Oxiri har girya oxir xandaest,

Mardi oxirbin muborak bandaest[19].

Uzbek translation:

Har yig'ining oxiri bir xandadir,

Oxirat mardi muborak bandadir[20].

The bayt has been translated by Askar Mahkam as follows:

Har nechuk faryod oxir xandadir,

Orta qolganlar muborak bandadir[21].

Translation: The end of any grief is joy. Those who are hurt and could see the consequence are considered great people.

Explanation: Crying comes from human deficiency and need, which draws us to the demands of perfection. No human life is everlasting. Goodness and hardship live side by side. The end of sorrow is a delight.

Odil Ikrom translated the bayt as follows:

Har yig'i, har nola so'ngi xandadir,

So'ngini ko'rgan muborak bandadir

Research has shown that this proverb is used synonymously with other variants by the people. Bibish Jurayeva, an associate professor of philology, who is doing research directly with folk proverbs, writes: "When a person is in a desperate situation, he should not feel sorry for himself and not be depressed as the light appears after every darkness and the followings are used in the same meaning:

1. Fifteen days is dark and fifteen bright.
2. Today is miserable, tomorrow is complete.
3. The one who rides foal will also ride a horse.
4. There is sweet for each bit of bitterness.
5. He who has a donkey will also own a horse.
6. Thin gets fat and hungry becomes full.
7. There is also fullness for hunger.
8. The lamp put out will light again.
9. There is a dawn for each dusk.
10. Black autumn snow does not stand.

The synonyms of this article show that the people are very wise and spiritually rich. Therefore, learning and introducing it to people is one of the challenges of today's generation.

In short, Mavlono Jaloluddin Rumy achieved a logical and effective expression of his ideas with folk proverbs in Masnavi. The talented translators of Masnavi have been able to use the richness of the Uzbek language in translating this large work into their native language, using all their talents. They have made significant progress by finding the Uzbek alternative of Persian folk proverbs and sing them in the creative translation process. This indicates that the translators have a unique ability to translate directly and have great artistic skills.

Another popular proverb "Response for a fool is silence" and its Persian alternative is "Silence is a sign of consent".

Mavlono Rumy managed to represent the situation of all sections of society skillfully in "Masnavi". The great author told and explained his ideas by asking the questions as "Who should lead a social life?" Did their former generation know about humanity? To what extent were they spiritually rich? Do they live for the good of society or pursue their own interests?" He argued that if knowledge and wealth fall into the hands of those inferior, they will harm society. He pointed out that this is as dangerous as putting a sword in the hands of a robber.

Overall, the poet referred to folk tales, the Holy Quran and Hadith as the basis for his assertion. In particular, after the title is mentioned, "Tavsir (meaning) of Yo ayyuhal-muzzammil!" As we know, the oyats of Sura Muzzammil are ordered to worship the Almighty in the evenings and to recite carefully. From this, the poet points out that the prays of such people will not be accepted and the answer to their requests will be "silence". To quote his opinion, he quoted a popular proverb "Javobi ahmaq sukut".Translator - poet Jamol Kamol also left it in the original:

V-ar naboshad ahli in zikru qunut,

Pas javobu-l-axmaq, ey sulton sukut[22].

Uzbek translation:

Bo'lmasa ul kimsa gar ahli qunut,

Jumla axmoqqa javobingdir sukut[23].

It is important to note that any author tries to enrich his or her mind based on real-life examples as they move from one topic to another to express their goals. Rumy also spoke of "the decline of the food of the soul of the Sufi,"saying that"the farmer when hungry would complain to his boss". Then the poet quotes the following bayt:

Guft:"O'ro nest illo dardi lut"

Pas javobi axmaq avlotar sukut[24].

Jamol Kamol translated this bayt into Uzbek beautifully:

Derki, dardi menga ma'lum – non ulut,

Unga eng a'lo javobimdir – sukut[25].

[18]Farhangi zarbulmasal va maqol. – Sah.255.
[19]Daftari avval. – Sah.36.
[20]Birinchi kitob. – B.85
[21]Asqar Mahkam. Birinchi kitob. –B.246.

[22]Daftari chahorum. – Sah.379.
[23]To`rtinchi kitob. – B.134.
[24]Daftari chahorum. – Sah.389.
[25]To`rtinchi kitob. – B.167.

Masnavi also describes "The story of Uzair's children". They asked their father if they had ever seen him. He replied that he was coming after him. One shouted from the good news and the other recognized him and lost consciousness, and said, "What is the good news, you are telling the good news itself?" In this narration, the writer emphasized the debate between the sons of Uzair in the artistic portrayal of the debate between his sons. He then stressed that it is better to remain silent than to say.To elucidate his purpose, he mentions the folk proverb "Response for a fool is silence":

Pas xamo'shi beh dihad o'ro subut,
Pas javobi axmaqon omad sukut[26].
Uzbek translation:
So'zni qo'ygil, endi xomushlikka o't,

Yaxshidir ahmoqqa etmog'ing sukut[27].

Our educated people face different people during the various discussions at each council and community meeting. Some of them are spiritually high, they always think and then talk. But there are people who can't be taught. As a result, he thinks that it is best for him to remain silent, otherwise it may lead to unpleasantness. But the meaning of the sentence and the answer is "pas javobi ahmaqon omad sukut"and that the Uzbek alternative is "It is better to keep silent to the fool". As we have seen that the author of the "Masnavi" uses folk proverbs in the right place, and we can be sure that once again we have discovered the translation skills of the translator Jamol Kamol.

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READING TOGAY MURAD'S STORY "PEOPLE WALKING ON THE MOON"

Abstract: This article analyzes the issue of Uzbek national values, international traditions, national color in the story "People walking on the moon" by Togay Murad, the national writer of Uzbekistan.
Key words: Togay Murad, short story, bakshi stye, interpretation of national values, 1970s Uzbek prose.
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Introduction

In 2018 the publishing house named "Sharq" published the best works of the writer under a book owing to the 70th anniversary of Togay Murad who was awarded with the state prize called with the name of Abdulla Kodiriy, the Uzbek national writer. The selected works of the talented writer included a total of five - two novels and three narratives.

Honestly, I flipped through this book because of its size. Despite of literary criticism, the number of unreal, exaggerated books, which lead you to wasting time, losing the benefit, has been increasing in the last year. In such "works" hard complex aspects of life remain, and many similar, shallow stories, short stories, and even novels are published, in which a beautiful way of life is imaginary, that is, far from reality. When I read Togay Murad's story "People walking on the moon" when it was published in the magazine "Yoshlik", I came to the conclusion that "the dialect of "jokchilar" was overused."

The works in this volume are written in a unique way and tune, in a poetic way, unlike usual novels and short stories. This analytical approach to the work of art could not be "digested" by many at that time. In his biography the Togay Murad said: "I spent three years wandering around to publish the story. In a fourth year in a row, I had it published. After this story, the number of my applause increased. I had a lot of

supporters. However, Togay Murad's work was later praised by critics and awarded with the Oybek prize.

As a reader, I read the work carefully several times and admitted that the author's story "People walking on the moon" was written in a new direction, but in a pure Uzbek spirit. However, I looked for an answer to the question of why this work was not allowed to be published for three years. Like most unauthorized works, I also wondered if the story reflected anything that would accuse readers of meddling in public policy and change their minds in a negative way. The point is that literary critics of the former Soviet Union, in an attempt to point out the shortcomings of Uzbek writers, objected that they did not create works about silkworms and teachers. We also hear the "rule" that images of workers, cotton growers, peasants, and local intellectuals must be positive heroes, while other categories, such as salespeople, must be negative heroes. Many works were created on the basis of the state order. The protagonists of such a work, of course, had to do something of national importance. The cotton-grower who mastered the desert, the laborer who brought water to the desert with a thousand sufferings, or the laborers who did hard work in construction, had to be at least worthy of the title of "Hero of Socialist Labor." But for true realist literature, the focus on those who lived with endless themes, their own daily life worries,

their own joys and problems, was almost non-existent in literature, on stage, or in film stories.

Togay Murad appeared as an artist who paid attention to these aspects of Uzbek literature. In this sense, the protagonists of his story "People walking on the moon" are straightforward, thoughtful, kind, simple and sincere, not repetitive in character, different from each other, with their foreheads in a remote village, earning a living from gardening, worrying about survival. It is enough to remember the images of honest, hard-working contemporaries who made walking the meaning of life and lived contentedly. One can especially admire the writer's artistic skills, which reflect the national spirit and the attractiveness of the Uzbek language. The main theme of the work is the fate of the nation. The fate of the Uzbek nation, who can't live without children.

The story "People walking on the moon" consists of VI chapters. Each chapter begins with the protagonist's conversation with the main hero of the work "Momo", and this conversation ends in the introductory part of the work. The story begins with **"Listen, Momo, listen"**, which the reader may not understand at first. Because it is only after reading the introductory part at the end of the work that one can understand that Momo, who is being interviewed, is dead. Lastly, in Chapter VII, members of the grieving family, according to the custom of the area in which they live, wear women's jewelry in a box for up to 40 days, walk in black, there is no radio or television in the house, and stay away from weddings. According to the author, Oymomo's nephew, it had not been forty days yet. [8.] It is natural for a person who lost a loved one to want to talk to him sincerely, to dream, to miss, to see.

Almost all of the natural landscapes depicted in the play and the events narrated in the language of the protagonist of the work complement each other. The work logically ends in Chapter VII, with the suffering, the longing, the recollection of the past in the human psyche of the bereaved. According to the language of literary critics, the plot of the work is written in a retrospective way, that is, in a way of going back in time.

Chapter II of the story begins with the sentence, *"Our grandmother is sitting on the floor of our grandfather."* In fact, the scenes depicted here are also depicted as the grandmother is sitting at the grandfather like an angel in a white gauze scarf as an image in the protagonist's imagination.

"The smell of ground came from the winds of the summer" said the protagonist of the work - in the language of the tiger: *"Wife, the harvest is good this year. There is an abundance of fruits ..."* The continuation of this unfinished text with three dots is followed by a description of nature: *"Wife, the apricots in our yard are drenched in water. Apricots are eaten by children on the street ..."*, we can read it in Chapter III.

At the beginning of Chapter IV: "... *I shake the apricot slowly. The apricots spill out ...",* the continuation of the story in Chapter V points out that *"Now there is an irreversible world ...".* It is said in the language of the protagonist of the work: *"My wife, I am going to plant trees with fruits. The passers-by touch it and the children eat them ..."* This sentence leads to embody the image of our compatriot Qoplon Bobo, who is extremely childish and useful only to those around him, in addition, he has faith and pleasant qualities.

Because of the sentence *"Remember? My wife"* in the text at the beginning of Chapter VI, we understand that the events described in the work took place decades ago, not during the time when the work was created by people associated with the ancestors of Qoplon Bobo.

This work, which fully complies with the requirements of the genre of short stories, created the life and adventures of the protagonist with a delicate spirit, high taste. It is no coincidence that Said Ahmad, the people's writer of Uzbekistan, called the story "People walking on the moon" as a "love song." This is because the work was written in the form of the protagonist's thoughts about his deceased spouse and the memories of almost 30 years of marriage that became a thing of the past. Because the demand for the story is such that its size is not large: even if it consists of 102 pages, the structure of the work differs from the usual story. The work consists of a total of Chapter VII, 164 compact volumes. For example, Chapter I is described in 37 passages relating to the marriage of Qoplon and Oymomo. In Chapter VII, however, the reality returns to the present day.

There are no inappropriate events that can be excluded from the story. The events that make up the plot of the work do not require excessive explanation, as the cause-and-effect relationship is logically interconnected. Everything is in place, in connection with the fate of the characters, all the events are organized around the protagonist for a single purpose. The story depicts the fate of a family of two people who married with care for each other, completely unhappy, suffering the pain of childlessness written on their foreheads. Oymomo and Qoplon, who lived with one hope for the rest of their lives, were forced to have a miserable life in front of the people: the words "childless" have a bad effect on a person. They named the missing child, refer to each other as "grandmother", "grandfather".

One has to think: did the creator want to write about "a little world"? or did he have another purpose? In any case, I believe that it is true that a strong work has been created that has taken its rightful place in the world of literature, enriching our national outlook, our native language.

They hopefully took all the action recommended in such a situation in the hope of having a child. Qoplon's father lamented that his only son wasted his

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life without children and insisted his son on breaking up his wife: *"Is it so difficult to say a word and marry to another woman?"* but his son refused this offer. The father turned his back on his son, who did not act as his father said, then left his son's house, and died without stepping back into this house. Yes, it is difficult for Qoplon to disappoint Oymomo, to break up his wife, because the couple's worries cannot be explained in words. It was a pain for Oymomo to give up the *"beloved"* person whom she met as her husband in her life. They were bound together by a mysterious love. It is human nature: we can easily solve others' trouble we can easily find a solution to others' problem. When we have trouble, we approach the issue differently, sometimes selfishly.

Numerous works of literature have been created on the theme of love which leads to "whitening hair" and "wrinkles on the face." In the foreword to the work of Togay Murad, the hero of Uzbekistan Said Ahmad said: "We have been respecting Abdullah Qadiriy a lot for almost seventy years. "That's because Qadiriy created national heroes." Indeed, no work has been created that will be imprinted on the reader's memory to the level of the novel "Last Days".

The protagonist of Togay Murad's work, which will remain in our memory for a long time and has been described as a "beautiful song about lovers" for lovers of literature, appreciated his love like *"Real love must be in the heart. If it is spoken about, it will be a lie."*

In the process of getting acquainted with this work of Togay Murad, we see that the way of life, customs, holidays, and even the customs and national games of the Uzbek people are lovingly expressed by the author.

The story "People walking on the moon" tells about the wedding in a different way from the wedding of Otabek and Kumishbibi in "Last Days". The reason why the Uzbek wedding is described by two brilliant representatives of our literature in two different ways is the difference between space and time: Otabek lives in the city, Qoplon lives in the village. Oymomo and Qoplon's wedding, a decorated house for the bride and groom, the bride's own hand-sewn suzannas, glasses, teapots, suzannas and jewels, as well as Eid gifts for the bride, Eid dresses, jellies, a waistband, handkerchiefs, in addition, the plight of the two youngsters, blessing wedding, special payment to the bride's parents for their daughter, turning the bride from the fire, stepping on the bride's feet, stepping on the bride's feet before entering the house, wedding greetings remind us of the wedding party organized in Khojasoat village, Surkhandarya region, where the writer was born and grew up. The description of the nature like *"The headless sables twisted the leaves of the poplars"* (*"Bebosh sabolar terak barglarini chappa-chappa qayirdi"*), *"The sparrows fluttered"* (*"Fotma-chumchuqlar shoxma-shox likkilladi"*), *"The girls sweated"* (*"Qizlar qoraqoshlar terdi"*),

"The giant walnut leaves on the banks of the hill rustled" (*"Adir biqinidagi bahaybat yong'oq barglari mungli shitirladi."*), *"The locusts squeaked"* (*"Chigirtkalar chirilladi"*) lead us to imagining the place where the protagonists live and the area where simple, peaceful, serene bean, deer-grass were spoken about, like the paradise called "olkar".

Togay Murad embodied "unwritten rules" but folk rituals of putting a bouquet of flowers in his eyes, nine plates at a wedding, sprinkling wheat on the groom's head, passing a thread through the bridegroom's shoulder with an unfinished thread, giving a white blessing to the bride, sprinkling flour on the bridegroom's face, bowing on the threshold, putting food on the dog's bridle, dripping oil on the fire, giving a baby to the bride, "the bride did not eat soup", calling the bride, floats, brushes her hair, shakes hands, shows the mirror, and the dog barks.

He also referred to the folklore, "The guest in the party has gone, the wedding is left.", "If one has a son, they exist but somebody has a daughter they have a trace", "The jug does not break every day, it breaks in a day", "Let the pot be full of soup, let the pillow be full with heads". He uses proverbs and sayings such as "Run away from evil or get rid of the tone", "Speak thoughtfully even if you play", "A woman in a sieve has fifty words", "If you throw a stone in the mud, it will jump on your face". He used riddles reasonably such as "The tall girl is gone, the tall girl is gone, her forehead is cracking and her forehead is cracking on the ground", "The top of the small pot is sweet" and the songs of the bride's salutation, the songs of the milking creature, the lamentation of the goddess, the mourning, of the mourners.

The author described the popular national holiday of our people: "Navruz": "The people did not sit as lofty calls, decisions, slogans, invitations, announcements, posters. The people went for a walk on the hills of their own free will". In addition, he informed that during the holiday national dishes are prepared: shirguruch, sumalak, pilav, halim, kuk patir, kuk somsa, kukoshi and bodomcha, iraqqi, chorgul, velvet doppi from the skullcaps worn by girls. The story mentions more than a dozen names of women's hats - gauze scarves, Iraqi scarves, farangi scarves, ottuyak scarves, shawls, balkhiroms, qulpirumol, shotutrumol, simrumol, gossamer scarves, silk scarves.

It was the dream of young women and brides to wear Olashakshaq, Zarkokil, Khanatlas on the holiday, but we only knew the names of a few types of fabrics like "atlas". The author wrote about this cloth so: "Our people moved the rainbow on the fabrics. They called it like atlas. Our people moved the seasons on the fabric. [8. 507.] referring to the original names of more than 20 types of satin fabric used in women's national costumes. Among the jewelry worn by brides and bridesmaids there are description about

gold earrings, jewelry, eight silver embossed zebigardon, breast tumors, nozigardons, three-row shackles, four-row five-embossed necklaces, almond-shaped silver necklaces on the left, glass bracelets.

From the outside, it can be concluded that the author described the customs, myths, customs, names of things used, events that we all know and do not pay attention to in our daily lives, but to date, no artist has been able to write in a poetically attractive tone in the national spirit.

Although the book was written during the heyday of the former dictatorial Soviet system, which forced us to renounce our religion and even ourselves for a long time, the reader is reminded of the nature of Laylat al-Qadr in the holy month of Ramadan and the Islamic year, washing, weaving, cleanliness during Eid al-Fitr. He sees the wearing of clothes, the remembrance of the past, the giving of Eid to orphans and widows, and the blessing of the humble.

Visiting the tomb of Sufi Alloyar to have a child, he prayed to Allah: *"When I am helpless, and defenseless I implore: O my God, save yourself! O God, help yourself! ...However, I did not say: "O party, save yourself! O Komsomol, help yourself! What was the apostasy, what was the apostasy from God!"* This cry like that was unusual thing for the readers of that time. It is unclear to us whether Qoplon was given a religious upbringing in his family, but he is a God-aware person like "God-within a man". It was impossible for my comrades to understand that we adults accept such statements.

It was a courage to write about the almost forgotten customs of Eid al-Adha, such as sacrificing the believers, slaughtering them alive, and shedding blood, such as Eid al-Adha for the bride and Eid al-Adha to the groom. Yes, today, 40 years later, it is easy for us to talk about it. The work was written in 1980. Seven years later, according to the March 7 resolution of the Communist Party of the Uzbek SSR, the celebration of Navruz on April 10, rather than March 21, was an attempt to turn it into a new Soviet tradition. That is the truth. In particular, it is true that my compatriots, who went to Navruzbulak in Jizzakh, were expelled by police and were not allowed to celebrate the spring holiday.

Togay Murad also explained the nature of such rituals as asking for consent before observing a person for the last time, chanting in a circle, calling for a funeral, tearing off a white coffin, and covering the coffin with white cloth and he expressed all of them in Arab and Uzbek languages.

Both of the protagonists of the story felt in their dreams that they were children, and Qoplon saw the legendary Xujai Hizr. It is natural for a person to dream about something that he thought or worried about, but neither's dream came true.

Since the short story is a relatively small-scale epic work, a single protagonist moves. That's why there aren't many characters involved in the play. But

for some reason, in addition to the heroes of the work, the image of the accountant, the secretary of the council and the precious grandmother is preserved in the memory of the reader.

When Qoplon and Oymomoni came to work the accountant faced them saying so: *"You are coming, Brother Qoplon! In the afternoon, or at the end of the day! Do you have a child crying in your house?"* These sentences lead us to understanding that he was foolish and dared to speak to people about their shortcomings. But the accountant continued to speak: *"I am speaking according to the law!"*, *"... The couple have no grief other than the belly! Again, they come too late for work! They have no children! We say that she breastfeeds her baby and she lullabies her baby! Whom do they suck, who do they worship! Do the couple worship each other? Do they breastfeed each other?"* He did not understand that he was being ridiculed. We have a feeling of respect to Qoplon who frowned, said himself, *"Let the law blow your head, the accountant, let your head blow"* because he was not equal to a short-sighted accountant for his weight, restraint, and composure. This case shows the uniqueness of his character. In his speech, the writer portrayed the individual characteristics of the accountant as a common feature of modern "junior officials" - a caretaker who could not rise to his position, indifferent to the fate of his subordinates, because one of the most important means of creating a human image in literature is character speech.

At the same time, the artist had an artistic perception of the problems that plague him. Usually those who work on the collective farm work from dawn to dusk. An eight-hour workday is not for them, but no one is claiming rights. For some reason, those who work in the fields work according to unwritten rules. Such reckless, rude accountants were found on those days, and are still found today.

Or, Qoplon, who went to the secretary of the council, did not speak to him face to face, his image was not depicted in the play. But he heard involuntarily from the secretary's office these sentences like *"When will this provocateur be stopped? When will this anonymity be eliminated? It used to be a tax issue, now it is! Thank you, correspondent, for coming to restore the truth"*, in addition, he was a witness to a conversation *"The secretary said that Xolliev, Saidov, To'raeva lost their lives five or six years ago."* In this way, the artist was able to skillfully show the reader what kind of person he really is, through the speech of this character, in a unique artistic way, although the image of the secretary of the council is not drawn in the play.

When Qoplon was at lunch with the secretary of the council, who had come to collect the two-year farm tax, he did not even invite him to taste the meal, because he considered *"It is impossible to have dinner with a person who stole things related to others. No, no! it is wrongdoing"[8. 565].* And from

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such a cold attitude of Qoplon the person with the peculiar character who did not want to greet the person who was not in his heart, was embodied before our eyes. This is why the image of Qoplon turned out to be uniquely vital, vibrant and believable.

Only well-portrayed images in a good work of art rise to the level of character. Although the image of Qoplon depicted in the story is a single person, thousands of Qoplons are imprinted in the minds of readers because of their differences in artistic imagination, worldview, and knowledge.

"Grandmothers like Kimmat momo do not join with the bad, and walk away from the bad. When they meet bad ones … they run away!

Grandmothers like Kimmat momo... work with the good ones and are interested in their problems! ...

For example, they spread filthy talk about a chaste man. "A fool man!" she says. They spread foolish talk about the wise. "A little more madman" - they say. They spread filthy talk about an honest man, "A wicked man!" they say.

When they speak, they speak with great mastery. They speak in a simple and pure manner. Their faces are like cheerful, their eyes are like kind.

Grandmothers like Kimmat momo know what about they must talk!"

A number of factors, such as the image of the precious grandmother and some of the details of her image, such as the unique style of depiction, the position of the character in the play, arouse hatred in the reader. The reason for this is that the writer did not paint a portrait of Kimmat momo, he painted the character's biography, vividly depicts his actions, exaggerations in his speech, delicate loops, his desire to pretend to be kind, but in fact touch the human heart and learn its painful points and secrets. These facts allow each student to imagine their own Kimmat momo.

We see the real face of this cunning woman in the dialogue between Kimmat momo and Oymomo, from the thought, *"Thinking a little ... I say, have you tried yourself ..."* and at the meeting for grape picking.

Togay Murad paid special attention to the fact that the details of the portrait were sufficient to create a human image as complete as the reader could imagine. The author's description of an orphaned but beautiful, wealthy girl - Oymomo is as follows:

"If we tell that she is the most beautiful, we may be wrong. However, we can't say that she is less sympathetic.

She became a pretty, beauteous, cute girl.

Her braided hair clung to someone, another human.

Otherwise, would it be so full of beatings?

Couldn't the black spot be on the corner of her thin lips? Wouldn't it be inside the hole in his chin?

Will his right cheek be on the tip of his forehead?"

At the end of the work, we can love Qoplon bobo, the man who did not tell his pain to others, swallowed his sorrows and regrets, and is accustomed to frying in his own oil and keep our feelings in our heart forever.

As you read this work, which is worthwhile to serve as a source, a guide for use by lovers of literature, you will see that the artist has worked hard to create characteristic images on the text. You will come to the conclusion that Togay Murad is a talented man with a very wide and deep knowledge, good memory and a rich outlook.

Having read the memoirs about Togay Murad, I agree with many of our contemporary writers that his works should be translated into other languages. Whereas I am interested how were the humorous nicknames used in "People Walking on the Moon", such as *"Karim po'stak, Suvon daroz, Norboy cho'pon, Nurmat ko'sa, Kayvoni momo",* besides them, dialect words like *"hamsoya, bo'zbola, boyanagina, ukkag'ar, binoyi, muztar birodarlar, bovujud, ena, ayna, aqllar, barakollo, bo'bagim, puchuqim, bo'laginam, omonlik, zardoli, chiminan, govkalla, loppi, jelagi, o'ngiri, undaychikin, sizdaychikin, xo'rak, o'rmak, ityaloq, qayraqtosh, bog'ot, beldasta, sag'al, shuytadi, vovaylo, pidana"* into other languages. Moreover, if these words, which are the source of "Uzbek dialectology", were not used as they are in the play, the story would not be as recognizable and unbelievable as it is today.

We are surprised at using some sentences in the third person plural instead of ones in the second person singular of the imperative verb in the dialogue between Oymomo and Qoplon. *"O'zingiz gapiring"* was given like *"O'zi gapirsin"[8. 510]* or *"Ay, havo, yog'yapti, eshityapsanmi? Bekorlarni aytibdi."* he said. Or in the phrase *"Kimga qaragan bo'lsam, seni deb qarab edim"* the word expression *"qaragan edim"* was used without the suffix "-gan" in the past tense form of the adjective *"qarab edim."*

At the end of the book, Vafo Faizullah said, *"Togay Murad omitted the suffix "-ga" in the text ... Composing such a text is not uncommon in the Uzbek prose."* I have some objection to this idea. In my opinion, the writer used the suffix "-ga" in the speech of the natives in the same way as it was used in the pronunciation of the indigenous people.

I have come to the conclusion that the language of the work itself may be the subject of a study looking through meaningful word expression and phrases like *"Vaqting xushmi?", "Vaqting xushmi?", "Xushvaqt bo'l", "Ilik uzildi vaqti", "Tolmush emish", "Oymomo ro'moli uchlarini elvagay qildi", "Xolasi ra'ykorchilik qildi", "Yonoqlari bulk-bulk uchdi", "Makiyon, nopayid bo'lmish bolasi azasini tutdi", "Qari toklarni kundakov qildi", "Ayta bering, uy ovloq", "Falak kavkabiston bo'ldi", "Kiyim o'ngirlari", "Aytgiligi yo'q", "Kishtala-kish.*

You will be lifted by the beautiful scenery behind such words and emergency parables as *"The oven is full of bread" "Winter is going on long" "The smell of spring came from the ground", "Since the early morning the mild wind blew", "Pleasant mild wind happened", "Navruz (The national spring festival of Uzbek people) covered the world with carpets from grass and earrings from flowers".*

"Several tulips have opened. The leaves are scattered" "A number of leaves have turned yellow", "Girls have become brides, children have become grooms, colts have become horses", "A great deal of snow has fallen as water has flowed ..." The sentences used in the tone enchant the reader like a fairy tale.

Unfortunately, there is no enough information about Togay Murad in any of the literary sources, even in neither "Literary Dictionary" published in 2010, nor in other textbooks and manuals. However, the author's last work was written in 1998.

I would recommend reading this book to human and literary lovers, linguists, those who are interested in the historical essence of our national traditions, who are not indifferent to the spiritual heritage of their people.

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THE SOCIAL PSYCHOLOGICAL FACTORS IN THE SUCCESSFUL COURSE OF THE COMMUNICATION

Abstract: The article describes the process of communication, in which the success of communication is positive due to socio-psychological factors. The main attention was paid to the emotional approach of people to an understanding of the world. The sociolinguistic and psycholinguistic points of view were forwarded in this article.
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Introduction

In the process of communication, people also develop personal qualities as they interact with each other. It is important to understand and realize one another in this process. Socrates said that people become a real intellectual when they do not understand much enough themselves and their surrounding world. Understanding each other is a socio-psychological process. Important conditions for this process of communication are: understanding the language of the interlocutor, understanding the characteristics of the interlocutor, understanding the impact of the relationship on the person (1st person in the relationship on 2nd or vice versa), mutual agreement, following it according to established rules [1. 115] We can comprehend people and the surrounding world, firstly, with the help of the sense of emotional knowledge. In vain the term "stimulus-reaction" is not used in the dialogue process. The term is derived from the concept of "stimulus-reaction", which was introduced by the founders of the direction of behaviorism in psychology. This concept in the science is one that emphasizes the actions that occur as a result of human exposure, response, and, above all, the reflection of emotional organs. Behaviorists initially based their conclusions on the responses to exposure to sensory organs in animals. Later, the term entered various disciplines, including linguistics. The

study of aspects related to the mental states of numbers in the course of communication can also serve as a bridge between linguistics and psychology. From an early age, people create their own cognitive process based on the predominance of different senses in finding out the world. In renaming the world, they use not only linguistic knowledge, but also the impulses (personal emotional perceptions) that affect their perceptions. Scientists sort this process according to the emotional perception of the world. We want to quote them based on our own comments.

1. Understanding the world through the movement of sight - visual - "The deaf do not stop what they hear, the blind do not stop what they hear " ("Zarbulmasal"). "It is said that if it is far from the eyes, it is far from the heart" (J. Rumi).

2. Understanding the world through the movement of hearing - audial – "If you want to be respected, you must speak a little enough. (A. Navoi). "If you want people to have a good opinion of you, listen to them" (A. Shopengauer). When a young man, who talked a lot, asked Socrates to become his apprentice in rhetoric, Socrates said, "You should be taught two things, not one rhetoric: the art of speech and the art of listening."

3. Perception of the world with the help of not revealing each action - kinesthetic – "Emotion affects the inner soul more strongly and is stronger than the

mind in moving it" (Ibn Sino). "Never reveal your feelings" (L, Tolstoy).

4. Understanding the world through the movement of messages and events, numbers - digital (from the English word "number"). – "The more a person knows the world, the more he understands himself" (I. Goethe).

One of the abovementioned four aspects is stronger in each person and these features are considerable at the time of communication. Taking into account them plays an important role for the participants of the dialogue to have success. The humans' personal qualities and understanding of the world can be known in the expression which they often use. There are expressions depending on visual aspect like "See as you imagine." in the speech of the people, related to the first type, when we can see sentences like "Be quiet, listen and pay attention what it sounds." in the speech of the people related to the second one. Interlocutors who have strong abilities of keeping their emotions use phrases such as "When I heard, I became hot or cold and frozen." On the other hand, people who feel the world in a set of events, news, and numbers, express their opinions by referring to such generalizing words as "interesting, wonderful, how much it will all be, I understand, I know."

According to the above, it is considered significant to pay attention which emotional perception speaker and listener have when starting to talk to people and to communicate in accordance with the selected treatment. Asking a question to the listener, knowing in what type of affiliation he or she is, can be said to be inserted factor in having success. Because it is a tried and tested fact that half of the answer is hidden in the questioner and that it is also a pledge for the answer. The wisdom like "The smarter question you ask the more intelligent answer you can have" can be said to mean four hidden types of sign. Depending on the situation of the interlocutor, speaking is a sign of both intellect and reason. Because the feeling of satisfaction from the answer is one of spiritual needs and it is also a process of goal setting and exchange of positive emotions when people understand and realize each other.

Not only linguistics but also psychology is one of the disciplines that study the process of communication. [5. 63]. According to the latter, communication is a process of interaction of at least two people, during which information is exchanged, relationships are established and developed, terminated or corrected [4. 4] . The process of perception of each other is an integral part of communication, which is the perceptual (Latin, perceptio- perception) side of communication. Man's perception by another one is called "social perception. "Initially, the term was used by J. Bruner in 1947, it meant the social determination of perceptual processes. Later, the term took on a different meaning,

and it began to mean the process of perceiving social objects, i.e., people, social groups, large social structures. It should also be noted that communication can only take place between people. The place of communication in human life cannot be compared to anything else. It is a well-known fact that the human child becomes a person in the process of communicating and interacting with others. Through communication, a person acquires both experience and culture. When a newborn is deprived of the opportunity to be in communication with others through speech, he can never become a person, that is, he remains at the level of a biological being in terms of his mental and intellectual development. A clear example of this is the experience of Akbarshah, one of the Baburiys, in his time in order to eliminate the conflict between languages [2. 6 - 7]. The experimental conclusion is clear that without conversation, the mute person does not achieve the status of human. After all, human development requires man, society.

When people perceive each other in the process of communication, the process of attraction (visual attraction) can take place, that is, there can be a "feeling of pleasure" in relation to the perceived moment. Attraction is formed as a positive emotional response of the speaker to the perceptual object. One of the easiest ways to engage an interviewee is to address him or her by emphasizing his or her name. For a pleasant word for every person his name to be kept in mind that one of the provisions of a good friend. Another simple rule of engagement is appearance, dress code, and positivity in the image. The unique expression like "one must be on good or bad terms according to people's clothes" is not spoken among the Uzbek people. Pleasure is one of the contagious and positive qualities that arouses in people and follows a person who possesses this quality. According to the nature of the people, the negative mood conditions that leave things led to a positive impression retain longer and more in memory than the conditions which cause of negative mood. It is not in vain that our wise people say, "Do not show your mother to your father without putting on cosmetics."

According to the theory of attraction, a person's inner beauty moves only when it is combined with his outer beauty [8. 22]. So external beauty, inner spiritual order - is the manifestation of discipline, taste and sophistication on the surface. It is also clear from the considerations that the perception of a speaker by the listener and the listening of his words are closely related to psychological and extralinguistic factors. In the process of communication, people transmit 7% of information through words, 38% through tone of voice, 55% through facial and body gestures, so that the role of words is 1/3 of the total conversation, and nonverbal means 2/3. 10:]. A person's voice can give more information about him than he says, whether his

voice is low or high, strong or weak, what his mood is, his age and social status, and where he comes from. So it is very important that we manage not only what we say in communication, but also how we say it.

Let's also pay attention to how far the interlocutors speak from a distance in the process of communication and what they provide information about. According to psychologists, each person has a personal "zone", which is in the range of 0-0.5 meters. Only the mother can allow her child and married people to enter the area. That is why this area is called the intimate area. The area of 0.5-1.2 meters is considered to be private (also called the area of friendly conversations), the area of 1.2-3.7 meters is considered to be a social area (work process, negotiation area), and the public area is 3.7 meters. People feel (intuitively) feel the boundaries of these areas without knowing it, and follow it. Only in older and younger people can these areas intersect in order to be closer to the interviewee. Scientists have observed that in people in the south, the distance decreases during a conversation due to temperament, while in the West, by contrast, the distance can be lengthened. According to gender differences, how important communication is for women, the purpose of communication is important for men, so it is common for men to listen to women's speech for only 2-3 minutes and ignore the rest, while women, on the contrary, tend to search for meaning in any word. Depending on the language and culture of each nation, it is natural that there are different laws and rules in the etiquette of conversation. For the British, silence is never a sign of consent, while for the French, calling a new interlocutor by name is a sign of obscenity, and it is customary not to address him by name until he offers it. For the Japanese, a message delivered by telephone or mail is never considered as important as live communication. It is common for the French to interrupt an interlocutor in a conversation, and if they take it as a sign of vitality, it is a sign of extreme obscenity or insanity for the Uzbek and Japanese peoples. German, English, American people are beginning to talk the main purpose of talking about the ad, and their friend also expects the rapid reaction capacity. In many eastern nations, the opposite is true: "not speaking about the main purpose at once" or "throwing the rope for a long time." This is the case for both Uzbek and Turkish peoples.

Among the Uzbek people, the main initiators of the conversation are usually adults, then men, and people with higher social status. Of course, gender differences can be not only negative but also positive for oriental culture. In the Uzbek people, women are less likely to speak than men. Women's initiative in conversation can be observed in the family, at work, but their weight is much lower than that of men, and this is considered acceptable in social norms. Certain social norms are different in other nations. Through the study of communication, we enter not only the spiritual world of man, but also his national - cultural world, the millennial laws of the nation. There are many aspects that need to be explored in the communication process, which are undoubtedly and relevant to serve as the most basic resource in the study of the human world.

In short, communication is about the participants understanding each other, that they can find common ground, and that they can end the conversation in a kind way, reaching a common goal. We need to keep in mind that ending a conversation when perception of people each other is not only a process of achieving a goal, but also a process of exchanging positive emotions. The study of communication and all its manifestations requires the study not only within the science of linguistics, but also in connection with other social sciences.

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Clarivate
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QR – Issue   **QR – Article**

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COMPLEX MOVEMENT OF OBJECT

Abstract: Due to the Cariolis force, objects that fall freely on the Earth's surface during the day are tilted to the east. Due to the slow rotation of the earth, these deviations are very small. In the case of very high-velocity bodies (e.g., rockets and projectiles) or when the motion lasts too long (e.g., rivers in the northern hemisphere wash the right bank, and in the southern hemisphere wash the left bank), this things will be noticeable.
Key words: force, slow rotation, movement, solid, cariolis acceleration, average velocity, object, coordinate system.
Language: English
Citation: Saidov, Q. S., & Bekmurodova, M. B. (2020). Complex movement of object. ISJ Theoretical & Applied Science, 05 (85), 316-322.
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*Scopus ASCC: 3100.*

Introduction

Cariolis strength is important in aerospace, meteorology and ballistics. The cariolis force, in turn, causes the cariolis acceleration. By determining the velocity and acceleration of a point in a natural way, we can induce a cariolis acceleration for a complex motion. To do this, we must first determine the velocity of the point in a natural way.

The velocity of an object at the moment in question is called its average velocity.

$$\vec{v}_{o'r} = \frac{\Delta \vec{r}}{\Delta t} \qquad (1)$$
$$\Delta \vec{r} = \Delta \vec{r}' - \vec{r}$$
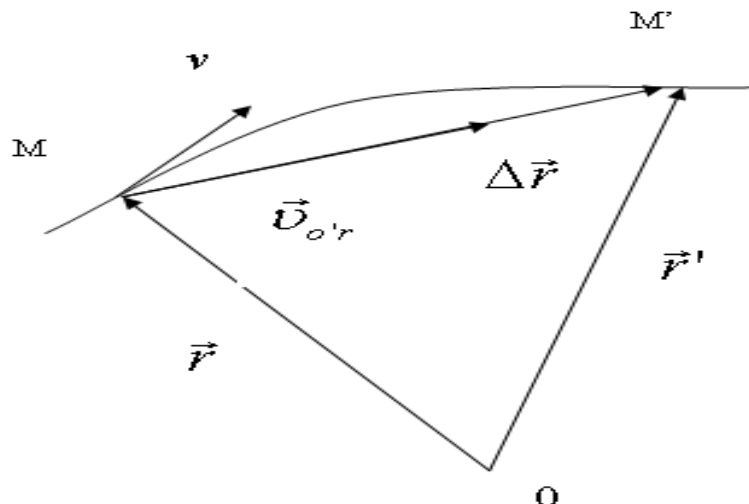
Clarivate
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The instantaneous velocity of an object is equal to the product of the radius vector and time.

$$\vec{v} = \frac{d\vec{r}}{dt} = \dot{\vec{r}} \quad (2)$$

In the coordinate system

$$\vec{r} = x\vec{\imath} + y\vec{\jmath} + z\vec{k} \quad (3)$$

$$\vec{v} = \dot{\vec{r}} = \dot{x}\vec{\imath} + \dot{y}\vec{\jmath} + \dot{z}\vec{k} \quad (4)$$

$$v_x = \dot{x} \qquad v_y = \dot{y} \qquad v_z = \dot{z}$$

$$v = \sqrt{v_x^2 + v_y^2 + v_z^2} \quad v = \sqrt{x^2 + y^2 + z^2} \quad (5)$$

$$\cos(\vec{v}, x) = \frac{v_x}{v}$$

$$\cos(\vec{v}, y) = \frac{v_y}{v} \qquad \cos(\vec{v}, z) = \frac{v_z}{v}$$

II. Literature review

To determine the velocity of a point in a natural way, its trajectory must be precise.

On the move

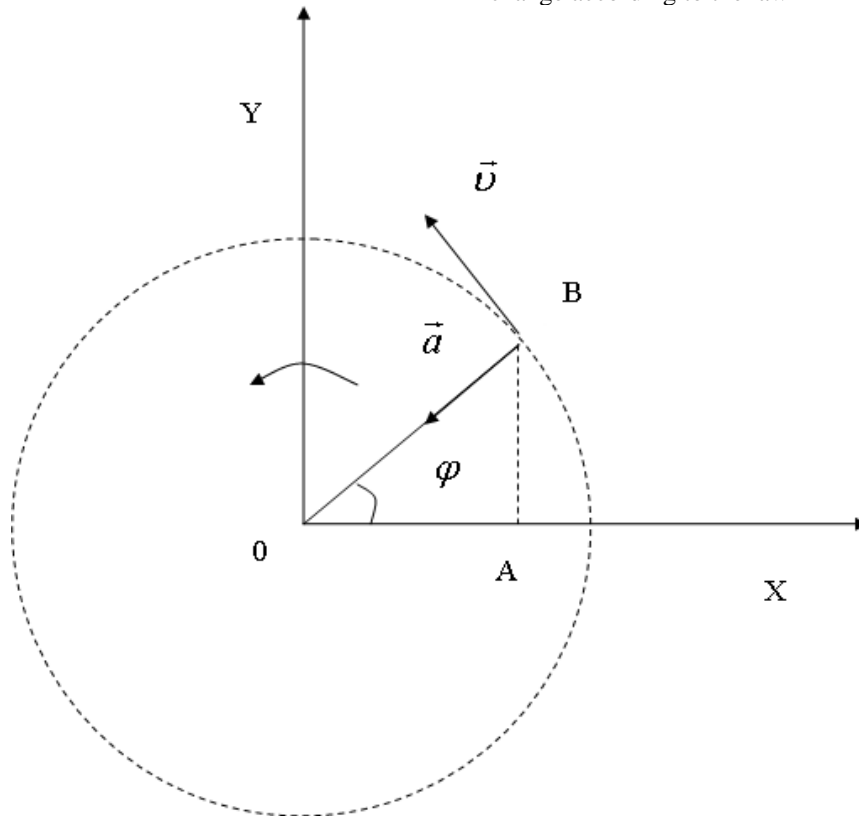$$\widehat{MM'} = \Delta S$$

Average speed $\quad v'_{o'r} = \frac{\Delta S}{\Delta t}$

$$v = \lim_{\Delta t \to 0} \frac{\Delta S}{\Delta t} = \frac{dS}{dt}$$

$$v'_{o'r} = \frac{\Delta S}{\Delta t} \qquad v_{o'r} = \frac{\Delta r}{\Delta t} \qquad v'_{o'r} \neq v_{o'r}$$

However, the modulus of velocity at the moment $\Delta t \to 0$ t is equal

$$v = \lim_{\Delta t \to 0} \frac{|\Delta r|}{\Delta t}$$

$$v = v'$$

because

$$v = \lim_{\Delta S \to 0} \frac{|\Delta r|}{\Delta S} = 1$$

We look at the acceleration of the object

$$\Delta \vec{v} = \vec{v}' - \vec{v}$$

$$\vec{a}_{o'r} = \frac{\Delta \vec{v}}{t}$$

$$\vec{a} = \frac{d\vec{v}}{dt} = \frac{d^2\vec{r}}{dt^2}$$

$$a = \sqrt{a_x^2 + a_y^2 + a_z^2} = \sqrt{\dot{v}_x^2 + \dot{v}_y^2 + \dot{v}_z^2}$$

$$= \sqrt{\ddot{x}^2 + \ddot{y}^2 + \ddot{z}^2}$$

$$\vec{a} = a_x\vec{\imath} + a_y\vec{\jmath} + a_z\vec{k}$$

Let us consider the motion of the B end of the rod relative to the fixed O center

$$OB = r$$

x angle of rotation relative to $\varphi = \omega t$ will change according to the law

$$x = OA = BO\cos\varphi = r\cos\varphi = r\cos\omega t$$
$$y = BA = \sin\varphi = r\sin\varphi = r\sin\omega t$$
$$v_x = \frac{dx}{dt} = -r\omega\sin\omega t$$
$$v_y = \dot{y} = r\omega\cos\omega t$$

$$v = \sqrt{v_x^2 + v_y^2} = \sqrt{(-r\omega\sin\omega t)^2 + (r\omega\cos\omega t)^2}$$
$$v = r\omega = const \quad \text{the speed module is constant } \omega = const$$
Let's find the direction

$$\cos(\vec{v}, x) = \frac{v_x}{v} = -\frac{r\omega \sin \omega t}{\omega r} = \sin \varphi$$

$$\cos(\vec{v}, y) = \frac{v_y}{v} = \frac{r\omega \cos \omega t}{\omega r} = \cos \varphi$$

Acceleration projections

$$a_x = \dot{v}_x = -r\omega^2 \cos \omega t$$
$$a_y = \dot{v}_y = -r\omega^2 \sin \omega t$$
$$a = \sqrt{a_x^2 + a_y^2} = -r\omega^2 \cos \omega t = const$$
$$a = r\omega^2$$

Although the modulus of velocity is constant, the modulus of acceleration is different from zero. Because the trajectory is curved, the direction of velocity is constantly changing.

III. Analysis

Acceleration direction

$$\cos(\vec{a}, x) = \frac{a_x}{a} = \frac{-r\omega^2 \cos \omega t}{r\omega^2} = -\cos \omega t$$
$$= -\cos \varphi$$
$$\cos(\vec{a}, y) = \frac{a_y}{a} = -\sin \omega t = \sin \varphi$$

$\vec{a}$ is directed to the center of rotation

$$t = 0$$
$$\cos(\vec{a}, x) = -1$$
$$\cos(\vec{a}, y) = 0 \qquad \vec{a},{}^{\wedge}x = \pi \qquad \vec{a},{}^{\wedge}y = \frac{\pi}{2}$$
$$t = \frac{\pi}{2\omega}$$
$$\cos(\vec{a}, x) = 0$$
$$\cos(\vec{a}, y) = -1 \qquad \vec{a},{}^{\wedge}x = \frac{\pi}{2} \qquad \vec{a},{}^{\wedge}y = \pi$$
$$t = 0$$
$$\cos(\vec{v}, x) = 0$$
$$\cos(\vec{v}, y) = 1 \qquad \vec{v},{}^{\wedge}x = \frac{\pi}{2} \qquad \vec{v},{}^{\wedge}y = 0$$

Determination of point acceleration in a natural way. If the motion of a point is given in a natural way, the acceleration is divided into components.

The tangent plane is perpendicular to the normal plane. MN is head normal, MB is binormal. Unity vectors $\vec{c}$- experiment, $\vec{n}$- normal, $\vec{b}$- binormal.

We express the vector $\vec{a}$ on the natural coordinate axes

$$\vec{a} = a_\tau \vec{\tau} + a_n \vec{n} + a_b \vec{b} \qquad (6)$$
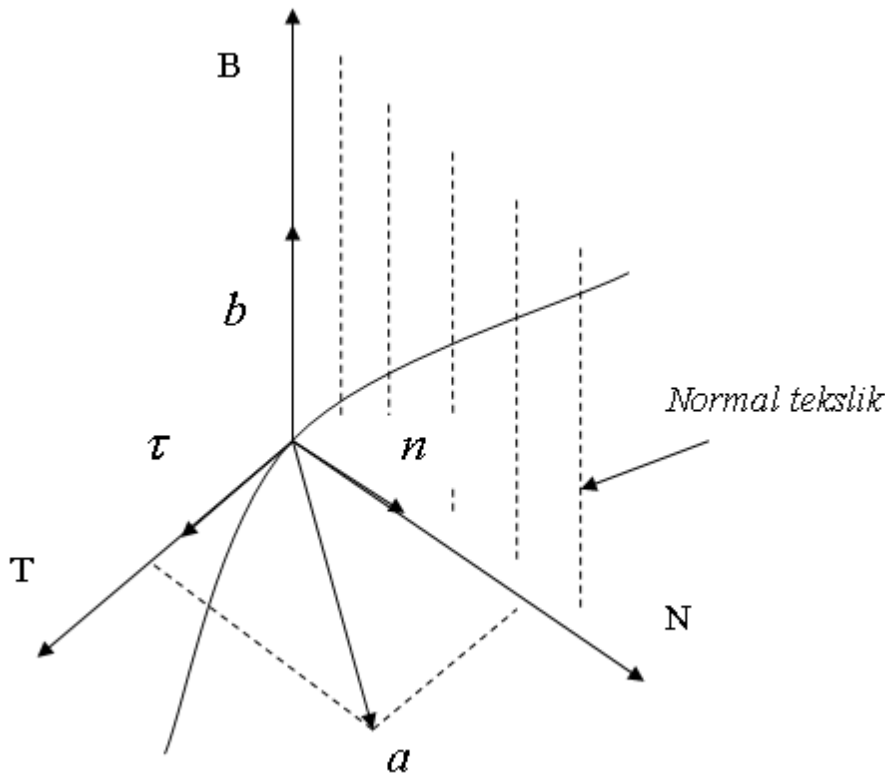
Because the vector $\vec{v}$ of the point is always directed to the trajectory

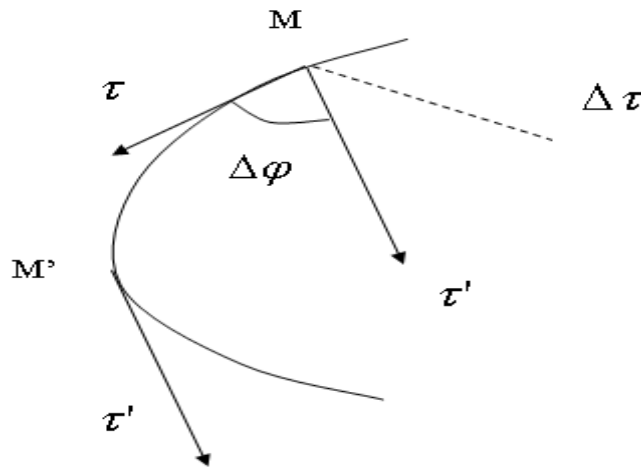$$\vec{v} = v\vec{\tau} \qquad (7)$$

We can derive two variables.

$$\vec{a} = \frac{d\vec{v}}{dt} = \vec{\tau}\frac{dv}{dt} + v\frac{d\vec{\tau}}{dt}$$
$$|\Delta\tau| = 2|\tau| \sin\frac{\Delta\varphi}{2} = 2\sin\frac{\Delta\varphi}{2}$$
$$|\Delta\tau| = 1$$

$$\left|\frac{d\tau}{dt}\right| = \lim_{\Delta t \to 0}\left|\frac{\Delta\tau}{\Delta t}\right| = \lim_{\Delta t \to 0}\frac{2\sin\frac{\Delta\varphi}{2}}{\Delta t} = \lim_{\Delta t \to 0}\left(\frac{\sin\frac{\Delta\varphi}{2}}{\frac{\Delta\varphi}{2}} \times \frac{\Delta\varphi}{\Delta S} \times \frac{\Delta S}{\Delta t}\right)$$

$$\Delta S = \widetilde{MM'}$$

If $\quad \Delta t \to 0 \qquad \Delta S \to 0 \qquad \Delta\varphi \to 0$

$$\left|\frac{d\tau}{dt}\right| = \lim_{\Delta\varphi \to 0}\frac{2\sin\frac{\Delta\varphi}{2}}{\Delta t} \times \lim_{\Delta S \to 0}\frac{\Delta\varphi}{\Delta S} \times \lim_{\Delta t \to 0}\frac{\Delta S}{\Delta t}$$

The first limit is 1

$$\lim_{\Delta t \to 0}\frac{\Delta S}{\Delta t} = \frac{dS}{dt} = v$$

$$\lim_{\Delta S \to 0}\frac{\Delta\varphi}{\Delta S} = k = \frac{1}{\rho} \qquad (8)$$

k-line curvature, ρ-. curvature radius.

$$\left|\frac{d\tau}{dt}\right| = \frac{v}{\rho} \qquad \frac{d\vec{\tau}}{dt}$$

The direction of the vector is normal to the head.

$$\vec{a} = \frac{dv}{dt}\vec{\tau} + \frac{v^2}{\rho}\vec{n} \qquad (9)$$

$$a_\tau = \frac{dv}{dt} \qquad a_n = \frac{v^2}{\rho} \qquad a_b = 0 \quad (10)$$

Hence the acceleration $\vec{a}$ lies in the tangent plane and can be divided into two components:

$a_\tau -$ effort or tangential acceleration.

$a_n -$ normal acceleration

$$a = \sqrt{a_\tau^2 + a_n^2} = \sqrt{\left(\frac{dv}{dt}\right)^2 + \left(\frac{v^2}{\rho}\right)^2} \qquad (11)$$

$$\cos(a, a_\tau) = \frac{a_\tau}{a}$$

$$\cos(a, a_n) = \frac{a_n}{a} \qquad (12)$$

Here are some special cases:

1. Smooth movement

$$v = \frac{dS}{dt} = const$$

$$\vec{a} = \frac{dv}{dt}\vec{\tau} + \frac{v^2}{\rho}\vec{n} = \frac{v^2}{\rho}\vec{n}$$

$$a_n = \frac{v^2}{\rho} \qquad a_\tau = \frac{dv}{dt} = 0$$

$$a = a_n = \frac{v^2}{\rho} \qquad (13)$$

IV.Discussion

Only a change in speed is characteristic.

1. Linear motion.

In a linear motion, the radius of curvature of the trajectory is $\rho = \infty$ and

$$a_n = \frac{v^2}{\rho} = 0.$$

$$\vec{a} = \frac{dv}{dt}\vec{\tau} + \frac{v^2}{\rho}\vec{n} = \frac{dv}{dt}\vec{\tau}$$

$$a = a_\tau = \frac{dv}{dt} \quad (14)$$

If there is a straight line

$$\frac{dv}{dt} = 0 \qquad \frac{v^2}{\rho} = 0$$

a = 0 object has no acceleration.

3.Smooth accelerating motion.

$$\vec{a} = \frac{dv}{dt}\vec{\tau} + \frac{v^2}{\rho}\vec{n}$$

The change in the algebraic value of the velocity is characterized by the acceleration a_τ

$$v = v_0 + a_\tau t \qquad (15)$$

$$S = v_0 t + \frac{a_\tau t^2}{2} \quad (16)$$

These formulas are suitable for both straight and curved movements

4. Harmonic oscillations.

As for the beginning of the calculation as harmonic oscillations $S = a \sin \omega t$ or

$S = a \cos \omega t$ (17)

variable actions under the law . $a > 0$,

ω- constant magnitude .Function functions change from 1 to -1

$-a \leq S \leq a$.

a-amplitude, $\omega - 2\pi$ the number of oscillations per second. Full vibration period.

$$\omega(\tau + T) = \omega\tau + 2\pi$$
$$T = \frac{2\pi}{\omega} \qquad (18)$$

ω- the rotational frequency of the vibration.

Advanced movement speed. The motion of a point with respect to a system assumed to be stationary is called absolute motion. $\vec{v}, \vec{a}$

The motion of a point with respect to a moving system is called relative motion. v_r, a_r

The motion of a system relative to a system that is assumed to be stationary at all points is called forward motion. $\vec{a}_R, \vec{v}_R$

Let the point move with respect to the moving system k' and the stationary k.
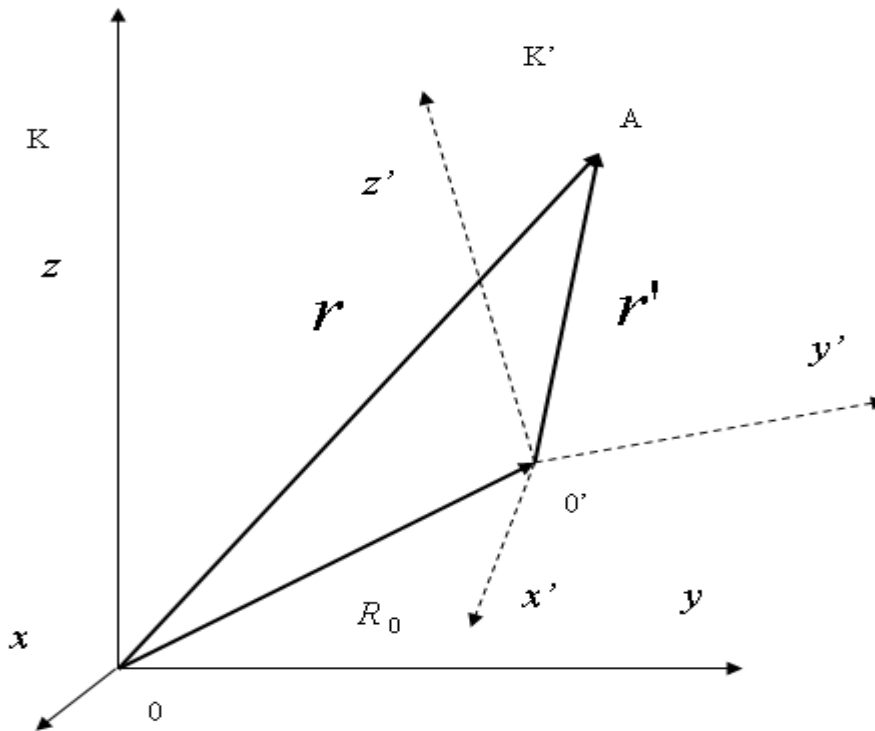
$\vec{r} = \vec{R}_0 + \vec{r}'$ (19)

If we harvest in time

$$\frac{d\vec{r}}{dt} = \frac{d\vec{R}_0}{dt} + \frac{d\vec{r}'}{dt}$$
$$\vec{v} = \vec{v}_R + \vec{v}_r \quad (20) \qquad \text{in this}$$
$$\vec{v}_r = \frac{d\vec{r}'}{dt} = \frac{dx'}{dt}\vec{i}' + \frac{dy'}{dt}\vec{j}' + \frac{dz'}{dt}\vec{k}' \quad (21)$$

The relative velocity of a point or k' is the velocity in the system

$$\vec{R}_0 = \vec{r}_0 + x'\vec{i}' + y'\vec{j}' + z'\vec{k}'$$
$$\vec{v}_R = \frac{d\vec{R}_0}{dt} = \frac{d\vec{r}_0'}{dt} + x'\frac{d\vec{i}'}{dt} + y'\frac{d\vec{j}'}{dt} + z'\frac{d\vec{k}'}{dt} \quad (22)$$

$\vec{R}_0 - x', y', z' - const$ the radius vector of a point when it is constant. $\vec{r}_0 -$ radius vector characterizing the center of mass of the object.

$$\vec{v} = \frac{d\vec{r}}{dt} = \left(\frac{d\vec{r}_0'}{dt} + x'\frac{d\vec{i}'}{dt} + y'\frac{d\vec{j}'}{dt} + z'\frac{d\vec{k}'}{dt}\right) + \left(\frac{d\vec{r}_0'}{dt} + \frac{dx'}{dt}\vec{i}' + \frac{dy'}{dt}\vec{y}' + + \frac{dz'}{dt}\vec{k}'\right) \quad (23)$$

The absolute velocity of a point.

From the last formula (23) we can derive $\vec{i}', \vec{j}', \vec{k}'$ and x', y', z' as variable quantities for absolute acceleration.

$$\vec{a} = \vec{a}_R + \vec{a}_r + \vec{a}_k \qquad (24)$$

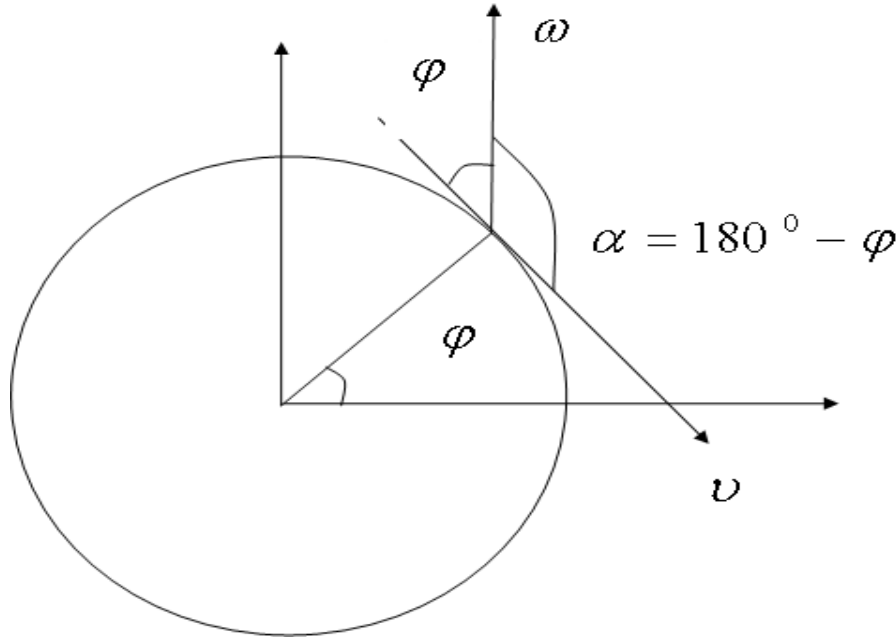$\vec{a}_R -$ rotational acceleration (cariolis acceleration)

$\vec{a}_r -$ relative acceleration of a point

$$\vec{a}_k = 2\left(\frac{dx'}{dt}\frac{d\vec{i}'}{dt} + \frac{dy'}{dt}\frac{d\vec{j}'}{dt} + \frac{dz'}{dt}\frac{d\vec{k}'}{dt}\right) \quad (25)$$

Hence, the acceleration of a point in a complex motion is equal to the sum of its rotational acceleration, relative acceleration, and cariolis acceleration.

Of course

$$\vec{v} = [\vec{\omega}, \vec{r}] = \frac{d\vec{r}}{dt}$$

The rotation is in motion or

$$\frac{d\vec{i}'}{dt} = [\vec{\omega}, \vec{i}'], \quad \frac{d\vec{j}'}{dt} = [\vec{\omega}, \vec{j}'], \quad \frac{d\vec{k}'}{dt} = [\vec{\omega}, \vec{k}']$$

Considering the caryolis acceleration using the vector multiplication formula

$$\vec{a}_k = 2[\vec{\omega} \times \vec{v}_r] \qquad (26)$$

It's a module

$$\vec{a}_k = 2\omega\vec{v}_r \sin(\vec{\omega} \times \vec{v}_r) \qquad (27)$$

Hence, the karyolytic acceleration of a point in complex motion is equal to the vector product of the relative velocity of the point and the angular velocity at a given moment of the excited *Oxyz* coordinate system.

For example, a point moving from north to south along the meridian with velocity $\vec{v}_r = 100\frac{m}{s}$ is affected by an acceleration to the east at $a_k = 1.26$cm/s at latitude $\alpha = 60°$.

$\left(\omega_y = 0.0000727\frac{rad}{s}\right)$ the angular velocity of the earth.

This formula can be used to solve problems related to the complex motion of a point as above.

V.Conclusion

In special cases, the given formulas can be used in the formation of knowledge, skills and competencies on the topic of types of mechanical movement in the 10th grade physics of secondary schools. The formulas are given ready. High mastery can be achieved when working with gifted students and explaining the essence of the topic by quoting formulas for high-achieving students in the classroom.

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QR – Issue   **QR – Article**

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PRINCIPLES OF STRATEGIC MANAGEMENT ON THE EXAMPLE OF HIGHER EDUCATION INSTITUTIONS

Abstract: this article analyzes global trends in the development of higher education, the basic principles of modern strategic management of higher education, the formation of corporate culture necessary for the implementation of the strategy, the development and implementation of a comprehensive development program.

Key words: strategic management, external environment, corporate culture, complex application, global competition, strategic goals, economic efficiency, fundamental knowledge, infrastructure.

Language: English

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Introduction

In his Address to the High Secretariat, President of the Republic of Uzbekistan Shavkat Mirziyoyev said: "As we aim to turn Uzbekistan into a developed country, we can achieve this only through accelerated reforms, science and innovation.

To do this, first of all, we need to nurture a new generation of knowledgeable and qualified personnel who will emerge as enterprising reformers, think strategically. That is why we have started to reform all levels of education, from pre-school to higher education and beyond.

In order to raise the level of knowledge not only of young people, but also of all members of our society, first of all, we need knowledge and high spirituality. Where there is no knowledge, there will be backwardness, ignorance and, of course, misguidance.

Higher education institutions will be gradually given academic and financial independence. This year, 10 of them will switch to self-financing. In addition, we will select at least 5 higher education institutions on a competitive basis and start transforming them in cooperation with prestigious foreign higher education institutions. To do this, it is necessary to reconsider the principles of modernization of the strategic management system of higher education institutions.

II. Literature review

Today, universities in all countries of the world are exposed to changes in the external environment, increasing its complexity and uncertainty, loss of previous stability, reduced public funding, as well as the rapid expansion and change in consumer demand for research, technology and educational services, worry about. Socio-economic reforms and the development of market relations in Uzbekistan strengthen these factors.

Increasing knowledge-based modern production and the development of society are shaping a new, rapidly changing market for intellectual labor. Higher education institutions (hereinafter referred to as HEIs) are constantly required to develop research in advanced areas of knowledge, change and improve curricula and technologies, modernize equipment, and improve the skills of teachers. In order for universities to meet the requirements of the external environment, they need to move to a new path of innovative development, monitor the education market and, in some cases, shape it themselves.

III. Analysis

The external environment for universities is regional governments, ministries and departments, other local and foreign educational institutions and research organizations, including institutes of the

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Academy of Sciences of Uzbekistan, local and foreign industrial enterprises, business and culture, public organizations, various associations, foundations, etc.

The university is in constant contact with the external environment - exchanging information, studying needs, receiving funding, attracting resources, developing partnerships, gaining experience, providing services, and so on. In order to maintain and strengthen the position of the university in the external environment, it is important that these interactions be more active, dynamic and effective.

The trends of the modern world are openness, publicity, continuity of education, reduction of state funding for education. Education is becoming more and more paid. As global competition between educational institutions intensifies, the winner will be determined by the one who conducts the highest quality education and research.

The educational environment is changing radically with increasing competition. Higher education is now breaking out of the country's monopoly and becoming an increasingly universal market feature.

This is facilitated by the development of information and communication technologies. The information revolution will lead to a knowledge-based economy, and here information will have economic significance. In the 21st century, one who can manage knowledge will have a significant advantage over others.

The need of the hour is that universities, as producers and suppliers of knowledge, should pay more attention to the production of quality "products". This approach is specific to commercial companies and should definitely be adapted to non-profit organizations, especially universities. However, universities around the world today face the same question as commercial companies - **how can a higher education institution provide an economical and efficient service?**

The answer to this question begins with solving the main task of improving the strategic management of the university on the basis of modern tools *"Strategic Management"*, which are successfully used by many enterprises and organizations operating in a market economy and competition. In this regard, efforts are being made to adapt and apply the general principles of strategic management to the university, which has decided to change its organizational behavior.

The concept of "strategic management" entered management practice in the 1960s. This was due to the development of production and business activity, the large dynamics of changes in the external environment, which required companies to take immediate action. In 1962, *A. Chandler* defined strategic planning as follows: "Predetermining an organization's key long-term goals and objectives, selecting a line of business, and allocating the resources needed to achieve those goals."

Over time, strategic management has become associated with the organizational mission and policies that ensure an organization's goals are achieved, as well as the programs and methods that implement them.

In the 1970s, the concept of strategic management was first introduced in the U.S. High School. Changes in the higher education system have forced American university leaders to look at business and look for ways to increase work efficiency here. Thus, the ideas of strategic management have penetrated into an area that did not exist before - the field of scientific activity - the world of scientific research and education.

During the period when the theory and practice of strategic management existed, about a dozen different approaches and scientific schools were formed, which are divided into **three groups.**

The first group includes schools of design, planning, and location based on explicit constructivism. They belong to **the second group**, which focuses on the process of strategy formation - schools of entrepreneurship, education, management, culture, environment and knowledge. They are described in detail with specific aspects of strategy development - forecasting, new opportunities, development, interactions, focus on thinking.

The third group is represented by the most common configuration school, and their set of related problems includes the process of creating a strategy, its content, the formation of the organizational structure and environment.

In the theory and practice of strategic management, the principles of efficiency prevail. Efficiency is directly related to cost minimization. When applied to higher education institutions as an object of management, it means that it always faces a shortage of resources (financial, material, intellectual), no matter how wide and rich its opportunities for scientific and educational activities. Fundamental knowledge and higher education are rising rapidly. This limits the internal structure and infrastructure of the university, determines the methods and mechanisms of optimal allocation of resources. The success of a university depends on its effectiveness.

An important condition for the successful strategic management of the university is that it is presented as an open system. Open systems theory views an organization as a set of interconnected subsystems embedded in its super system - the external environment. An open system means communication with the environment, and the purpose of the system is to adequately meet the requirements of the environment.

Institutions that successfully use strategic management methods in their practice lead different

schools. For example, *the London School of Economics* (UK) implements *the School of Planning* approach. Its uniqueness lies in the significant formalization of the main methods of strategic management, the priority role of the plan, in which each step is described and documented in detail.

In this case, a strict mechanism of control and verification of compliance with the instructions on the implementation of the plan is applied. Undoubtedly, the planning school's approach to strategic management is most appropriate for universities that are developing a hierarchical component of their corporate (organizational) culture.

1. **Formation of goals and strategic vision**-goal forms the main task of the university, describes its traditions and existing features, strategic vision determines the future direction of the university and forms its future image. Goal and strategic vision are often the same subject.

The major structural units of the university - institutes, faculties and centers - form a unique strategic vision due to the specifics of the field of activity and other differences, and adapt it to the overall strategic vision of the university.

2. **Goal setting** - In setting goals for the university, its mission and strategic vision become clear results, striving to achieve them. It is preferable to set big goals to exclude inertia and stagnation in the team. Goals should be measurable, which will contribute to the university's global goal.

Institutions, faculties and centers of higher education institutions set goals that are consistent with their goals and strategic vision, consistent with the university as a whole, and develop development programs. The goals are **financial** and **strategic**.

The strategic goals are, as a rule, to strengthen the position of the university in the field of science and education, and **the financial goals** are to achieve the planned financial performance.

The strategic goals are to increase the competitiveness of the university and its departments by improving the quality of scientific products and educational services, reducing the cost of their production, improving the reputation and level of the university. The financial goal is to achieve financial results in the markets where the university and its departments specialize in high-tech products and educational services.

3. **Strategy Development**-University strategy answers the question of how goals can be achieved, taking into account the current state and prospects of the university and the external environment.

To achieve the required goals, the following is required:
• Well-thought-out and focused actions;
• Attitudes to contingencies and changing circumstances;
• Training of university staff in the changing external environment.

IV. Discussion

The strategy of the university should be **planned, active** and **flexible**. New opportunities and threats, as well as trends in relevant markets and customer requirements, need to be identified in a timely manner. The ability to learn faster than competitors is probably the only sustainable competitive advantage.

It is necessary to strengthen the "entrepreneurial spirit" of higher education, to adapt more quickly to changing conditions than competitors, to introduce innovations, to increase efficiency and to accept reasonable risks. The university's strategy needs to change gradually, so developing a strategy is not a one-time effort, but a continuous process. Frequent changes in strategy indicate shortcomings in assessing the situation and forecasting development. A well-developed strategy can remain unchanged for years. It is sufficient to correct it taking into account the changing conditions. Strategic planning can be long-term (for years) and short-term (up to a year).

4. **Implementation of the university strategy** - The implementation of the university strategy includes administrative work on the organization and conduct of a number of specific activities:
• Formation of the organizational structure of the university, which is able to **effectively implement the developed strategy**;
• **Allocating sufficient resources** to the strategically important areas and departments of the university to solve tasks;
• **Development of policies** that support the strategy, improving the quality management system of the university;
• **Creation of conditions** for effective work of employees through the use of modern information and communication technologies, knowledge management system;
• **Development of corporate culture** of the university in the areas that will help to implement the strategy;
• Introduce a system of incentives for employees to achieve the goals and planned results in the implementation of the strategy;
• Creating a formal and informal leadership system so that employees are constantly working to achieve their goals.

5. **Evaluation and additions -** The external environment and internal situation in the university should be constantly monitored. If the implementation of the strategy is not carried out as planned, it is necessary to analyze the causes and plan and correct accordingly. The main task of university managers and their departments is to improve the adopted strategy, not to radically change it or develop new strategies.

There are four levels of management in the university:

The first level - the rector of the university, vice-rectors.

The second level - directors of scientific and educational institutions, deans of faculties, directors of major centers.

The third level is the heads of the main structural units.

The fourth level is the heads of departments, employees of the department.

Bukhara State University can consider five target and seven development programs in the areas of activity for 2020-2025.

Development programs in the field of activity:

1. "Improvement of scientific activity".

2. "Improvement of educational activities".

3. "Improvement of University Management."

4. "Improvement of financial and economic activity".

5. "Improvement of administrative and economic activity".

Targeted development programs:

1. "Digitization of the University."

2. "Advanced Innovative Education".

3. "Personnel management, formation and development of corporate culture".

4. "International cooperation and the formation of the university's global image."

5. "Scientific and technological developments and commercialization of educational products".

6. "Creating a Multilingual and Multicultural Environment".

7. "Increasing the real income of the university community and creating favorable working conditions for them."

V. Conclusion

Today, the replacement of conservative managers with "new generation" managers, changes in the structure and management style of higher education are the brightest signs of leadership in creating a new management culture.

As mentioned above, the absence of contradictions between the adopted strategy and the existing corporate culture is very important for the implementation of the university development strategy.

Therefore, university leaders need to become more familiar with the methods of targeting the corporate culture of the organization in order to make appropriate changes in strategic management.

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QR – Issue QR – Article

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GENERAL VIRTUES OF UMAR KHAYYAM'S PHILOSOPHICAL VIEWS

Abstract: The article describes the interpretation of the works of Umar Khayyam and their philosophical concepts. Khayyam attracted the attention of all as a person who did not follow any of the various categories of his time with his whole being, and who had an independent opinion and position. On the other hand, he seems to have been a more cautious man. After all, not everyone was able to live long in a very delicate and complex period and avoid severe conflicts.

Key words: philosophical concepts, assumptions, interpretations, philosophical heritage, narrators and historians, rubai.

Language: English

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Introduction

According to a story in Mawlana Rumi's "Masnaviyi ma'naviy", the Indians take an elephant into a dark house. People who have never seen an elephant in their lives are also taken into the house one by one. It was impossible to see the elephant in the dark. Therefore, in the dark, those who entered would reach out, touch an elephant's body. One felt his trunk and said that an elephant was like a tarn, another found his ear and said that an elephant was a huge fan, a third held his leg and said that an elephant was like a pole, and another felt that an elephant was like a table. So, whoever touches an elephant's limb imagines the animal as that limb. [1]

The Western philosopher and the learned East's perceptions of Khayyam are similar to the people's conclusions about elephants in this story. One of them wants to see Khayyam as a hedonist, a drunkard, an Epicurean, an atheist, a blasphemer, a materialist philosopher, and the other wants to see him as a theologian, a Sufi, and sometimes a saint. The attitude of later generations towards Khayyam is in some ways reminiscent of the views on the fate of Mansur Hallaj. As for the fate of Hallaj, it has been more than 1,200 years since humanity came to a definite conclusion. What kind of person was Hallaj actually: a blasphemer claiming to be a god, or a devout Muslim? Is he a thinker who has enriched the world of thought, meaning and essence, or is he the author of harmful ideas?! Although not at the level of Halloj, Khayyam's personality is sometimes seen in various dark, sometimes sparse, and sometimes completely absent areas of various doubts, assumptions, and interpretations.

II. Literature review

Ghiyasiddin Abulfath Hakim Umar Khayyam (d. 1047–1123) was born in Nishapur, Iran, during the Seljuk rule (d. 1044–1203), spent most of his life in his hometown, and eventually died there. His tomb is also in Nishapur.

Khayyam received general knowledge of the Qur'an, Arabic grammar, Arabic and Persian literature in his hometown under Qazi Muhammad. In the presence of Sheikh Muhammad Mansur, he got acquainted with the philosophical heritage of Ibn Sina. And then, until the last moments of his life, Ibn Sina became a traveler in the world of thought. It is said that an hour or two before his death, he had in his hands Sino's famous book on philosophical problems, "Shifo".

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III. Analysis

Probably due to Khayyam's high devotion and respect for Ibn Sina, some narrators and historians have erroneously concluded that he was educated by Sina. But this is a far cry from reality. For this, Khayyam had to be older than the above-mentioned teachers. Khayyam was a true disciple of Sino and his most loyal and steadfast follower. The fact that he was always supported by the spirit of Sinai and enjoyed his works and views is enough to be considered a disciple, of course.

… One day, Abulbarakot asked Alouddawla Khayyam, the governor of Ray, one of the disciples of Baghdad, about his harsh criticism of Sina's views, and asked him what he thought of it. Khayyam said, "Abul-Barakat does not seem to understand a single word of Ibn Sina, so how can he criticize him?" - answers [4]. There is another piece of evidence that links Khayyam to Sina: some historians, especially Safadi and Qutbiddin Mahmud Shirazi, report that Khayyam became a disciple of Bahmanyar, Sino's most famous disciple. According to sources, Khayyam also studied science in Samarkand, one of the major scientific centers of the time, and benefited from the source of wisdom and enlightenment of the ancient Turanian peoples. This can be seen in both the scientific works and the philosophical rubai of the thinker.

Khayyam Movarounnahr lived in the heyday of Khorasan, western Iran and the Ottoman Empire. During this period, as in the Samanid period, religious and mystical sciences, as well as natural and exact sciences, as well as literature and art developed at a high level. It was during this period that such great scholars and poets as Hakim Nizami Ganjavi, Haqqani Shirvani, Nosiriddin Tusi, Abulmajid Sanoi, Nizamulmulk, Muhammad Ghazzali, Ahmad Ghazzali, Mahmud Zamakhshari, Nizami Aruzi Samarkandi, Bayhaqi, Fakhriddin Razi came to the field. When it comes to Umar Khayyam's nickname, it is said that his father probably chose this nickname because he was a tentmaker.

However, there is no information or indication in the sources that Khayyam was a farmer. In addition, Khayyam did not have the time or need to engage in handicrafts. After all, Khayyam spent all his childhood and youth mainly studying science. When he reached maturity and became famous as a scholar, he gained great prestige and fame in the Seljuk court and in Khorasan in general. He was also nicknamed the "program" for his prestigious service at the palace. According to Khayyam's conversation with Khoja Kashani, Devoni was paid ten thousand dinars a year.

As an encyclopedic scholar, Khayyam left a rich scientific and literary legacy. In particular, his treatise on algebra, "Al-jabr val-muqobala", was used not only as a textbook in the East, but also as an important guide in Europe. Written in Arabic, this work was published in Paris in 1851, along with a French translation. Another of Khayyam's most famous works, "Fi sharhi mo mushkil min sodiroti kitobi Uqlidus" is the only manuscript in the Leiden Library in the Netherlands. A manuscript of his physics treatise, "Fi sharhi mo mushkil min sodiroti kitobi Uqlidus", is in the Goethe Library in Germany, and a Persian treatise on philosophy, "Risola dar Vujud", is in the British Museum. There are also several other works attributed to Khayyam. The most important of them are the treatises on nature - "Kavn va taklif" and "Lavozim ul-makna dar fusul and illati ixtilofi havoi bilodu aqolim." In addition, Khayyam is one of the main authors of "Ziji Malikshohiy", one of the first Zijis created during the reign of Seljuk Sultan Malikshah under the leadership of Minister Nizamulmulk.

During the reigns of the Seljuk sultans Alp Arslan and Malikshah, the Shafi'is who came to power during the reign of the sage Nizamulmulk (author of "Dastur ul-Muluk" or "Siyosatnoma"), who was prime minister for almost thirty years, debated with the Hanafis, and other sects The scientific and ideological school of thought, the anti-Shiite and, finally, anti-philosophical movements, jurisprudential, ideological and philosophical conflicts, and sectarian strife did not stop the rapid development of this period. Khayyam lived in a time of great political and social conflict, but at the same time a growing interest in science.

Khayyam disliked the four categories of truth-seekers, the Ismailis (theologians) and the Mutakallimin (Ash'aris; theologians, theologians), it would not satisfy him. In his philosophical treatise, "Dar ilmi kulliyoti vujud", Khayyam divides those who struggle in the field of knowledge and understanding into four categories: mutakallims; philosophers and judges; Ismailis and scholars; Sufis. He then gives a brief description of each of them, pointing out their weaknesses and shortcomings. However, it is necessary to recognize the mystics as the most preferred group among them. This is somewhat reminiscent of the life of Muhammad al-Ghazali. Ghazzali, one of the great leaders of the Shafi'i school of Sunni Islam, first became a master of jurisprudence and then theology, but eventually renounced all of them and found peace in mysticism. "I know," he says, "that the most correct of all paths is the path of mystics, and that the closest people to God are the Sufis." Khayyam and al-Ghazali are, so to speak, like two opposite poles. Khayyam is a philosopher-rationalist, a logician, a mathematician, a naturalist and an astrologer, as well as a poet who sang the will of man. Despite the fact that his closest friends and patrons, such as Nizamulmulk, were prominent members of the Shafi'i sect, the minister did not limit himself to any sect. Al-Ghazali, on the other hand, is one of the religious scholars and leaders who did not deviate from the Shafi'i school and the teachings of the Ash'arites. However, when it reaches the point of

mysticism, it is as if these two poles are approaching…

IV.Discussion

In addition to being a philosopher, Khayyam was also a great astrologer. He was interested in this field from a young age, and his teacher said, "Khayyam sees the interpretation of the verses of the Qur'an in the science of the stars." Nizami Aruzi testified that although his knowledge was unparalleled in the science of astrology, he did not believe in divination by looking at the stars. Khayyam was not a fortune teller, but an astrologer. This is evidenced by his work on the creation of the work "Ziji Malikshohiy", the construction of the first observatory (unfortunately, this observatory was not completed for unknown reasons. Two hundred years later, Mirzo Ulugbek realized the dream of Khayyam and Nizamulmulk). Also, some of Khayyam's rubai cannot be understood without a good knowledge of classical astronomy and natural sciences.

For example:
Govest dar osmonu nomash Parvin,
Yak govi digar nuhufta dar zeri zamin.
Chashmi xiradat boz kun az ro'yi yaqiyn,
Zeru zabari du gov mushte xar bin.
Meaning:
Osmonda bir ho'kiz bor, uning nomi Parvin,
Yana bir ho'kiz yerning ostida yashirin.
Aql ko'zingni yaqiyn (qat'iy ishonch) bilan och:
Ikki ho'kiz (osmon bilan yer) o'rtasida
bir to'da eshakni ko'r.

The oldest source of information about Khayyam is Nizami Aruzi Samarkandi's "Chahor Maqola". Aruziy, who was a contemporary of Khayyam, writes that he saw Samarkandiy thinker in Merv and that the Sultan went hunting with him, mentions it under the title "Hujjat ul-Haq" and mentions its place in the science of nujum. But Khayyam's poetry does not say anything about his rubai, which shake the earth and the sky. Muhammad Awfi Bukhari, the first tazkiranav, who lived about a generation or two after Khayyam, also does not give any information about Khayyam in his famous work "Lubob ul-Albob". Khayyam was not one of the poets in the work "Tazkirat ush-shuaro" created by Davlatshah Samarkandi in the following periods. Why? Wasn't Khayyam a poet? So who are the rubai known by his name?

Zamakhshari, Nizami Aruziy and Bayhaqi saw Khayyam in their youth and met him, but did they not know that he wrote rubai? It is possible that Khayyam read them from his own rubai, but is it possible that the young scholars did not understand or did not pay attention to these rubai at all? It is difficult to say anything definite… It is only clear that for the first time the famous thinker Fakhriddin Razi mentions one

of the real rabbis of Khayyam, and from that moment the poet Khayyam entered the field.

As mentioned at the beginning of our article, opinions differ about the personality of Omar Khayyam and his work. In particular, one of our religious scholars, Sheikh Muhammad Yusuf Muhammad Salih, in his treatise "Zikr ahlidan so'rang" based on the work of Allama Abu Nasr Mubashir Tarazi "Kashful Lison ar ruboiyyat Umarul Hayyam" conclude that.

The number of Khayyam rubai is estimated at 100 to 300 and even more. Opinions on this vary. In particular, Sadiq Hidayat says: "The manuscript of Khayyam's rubai, written in Sheroz in 865 (AD), is kept in the Bodlen Library in Oxford under number 525. There are only 157 rubai in this copy. However, the number of rabbis who belong to Khayyam and are confused with the rubai of other poets and Sufis, such as Abu Said Abulkhair, Afzal Kashani and Mawlawi, now ranges from 500 to 750 "[8]. In any case, a group of scholars considered about 178 rubai to be Khayyam's own.

There are many poets in the Eastern literature who wrote in the rubai genre. Abu Abdullah Ja'far bin Muhammad Rudaki from Samarkand (858-941), the flower of Persian-Tajik classical poetry, recognized by many scholars as the inventor of the rubai genre, from Ibn Sina, Abu Said Abulkhair, Farididdin Attar, Mawlana Jalaliddin Rumi, Abdurahman Jami, Alisher Navoi Many poets, such as Zahiriddin Muhammad Babur, Mirzo Bedil, Soyib Tabrizi, wrote beautiful rubai. Even if he gathers the rubai of some of them together, it becomes a separate devon. Khayyam brought the rubai genre to a new level of perfection in both form and content. According to Najmiddin Kamilov, a well-known Uzbek scholar who studied Khayyam's work from the point of view of comparative literature and translation and created the first "Hayyomnoma", he wrote: "flourished and raised the rubai genre to its highest peak "[9].

There is probably no highly cultured nation in the world that has not read Khayyam's rubai in their mother tongue. At the same time, all scholars unanimously acknowledge the services of the English writer and translator Edward Fitzgerald, who made Khayyam famous in Europe. For example, Arthur Arberry, another English scholar who translated Khayyam's rubai with great interest after Fitzgerald, said: "Umar Khayyam's international fame is a rare event in the history of literature. Because if Edward Fitzgerald had not translated his works and these translations had not gained popularity among readers, he would have been recognized only by certain circles in Iran and a group of experts outside of it "[10]. In fact, after Fitzgerald's translations, Khayyam's rubai were translated into German, French, Russian, Italian, Spanish, Czech, Dutch, Portuguese, and other languages, and spread throughout Europe, where articles and research began to appear. However, 154

years have passed since that time, when the star of fame of the Khayyam rabbis has not yet died or the process of translating it into many other languages has not stopped. Khayyam's legacy has always been valuable to the Uzbek people. In the distant past, his rubai were actually recited and enjoyed. In the recent past, for the first time, our famous orientalist Shoislom Shomuhamedov translated some of his rubai into Uzbek and presented them to our people. Sh. Although Shomuhamedov's translations differ from the original in that they are translated at finger weight, they are remarkable for their simplicity of language and style, as well as for their attractiveness and fluency. Others have tried to translate some of the examples into statements. At the same time, there is a need to translate all his rubai in the weight of desire. Khayyam's short poem, in the rubai, depicts the noble and sophisticated creature called Man in all its geographical forms, which is incompatible with the kayhans and the Kahkashans. As the world reflects the world in the mirror, as if the sea and the river fit in the jar…

V.Conclusion

From every verse of Khayyam's hymns, there are cries of protest against a world full of hypocrisy, superstition, deceit, immorality, violence and oppression. The power, majesty and tenacity of the human psyche and will are present in every melody of Khayyam's rubai. In fact, Khayyam created a great philosophy - the philosophy of life, with a "small" poetry of less than two hundred rubles. Scholar Tarazi may have tried to write poetry in Khayyam's spare time, but his main work was not poetry. For, indeed, the sources remain silent about the poet Khayyam. But it is possible to write a rubai even if you are a philosopher, theologian, cleric!

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ISSUES OF APPLICATION OF THE MAIN PRINCIPLES OF COMPARATIVE LITERATURE IN THE STORY GENRE

Abstract: *Abdulla Qahhor, a well-known master of short stories in Uzbek literature, wrote in his article "Let's Learn from Chekhov" about Leo Tolstoy's attitude to Chekhov's work: Leo Tolstoy called Anton Pavlovich Chekhov "Pushkin in prose." This was a high assessment of Chekhov's work by the Great Russian writer. He sees Pushkin as a genius poet, but in prose he sees Chekhov in the same position. The fact that the work of the unique prose writer Chekhov deserves such an attitude is recognized today in the literature of the whole world, and it is not in vain.*

Key words: *short stories, writer, dramatic skills, natural laughter, character of the protagonist, artistic power.*

Language: *English*

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Introduction

The famous Russian writer Anton Pavlovich Chekhov was born in 1860. He graduated from the medical faculty of Moscow University in 1884. He worked as a doctor. From 1892 to 1898 he lived in the village of Melikhovo (now Chekhov) near Moscow, where he provided medical care to local farmers. He opened schools for their children. He contracted tuberculosis and moved to Yalta in 1898. After recovering, he went to Badenweiler (Germany) in June 1904 and died there.

In the second half of the 1880s, Chekhov wrote for the theater the poems "Ivanov" (1887-89), "Alvasti" (1889, later renamed "Uncle Vanya"), the one-act play "Wedding" (1889), as well as On the Harm of Tobacco "(1886)," Bear "(1888), and" Jubilee "(1891-92).

He traveled to Sakhalin in the 1990s and became acquainted with the tragic lives of prisoners of war and exiles. Memories of this trip are reflected in the story of the 6th Chamber (1892) and the book Sakhalin Island (1893-94).

II. Literature review

By the end of the 1990s, Chekhov's dramatic skills had reached their peak. The staging of the plays Chaika, Uncle Vanya (1896), Three Sisters (1900-1901), and Olchazor (1903-1904) at the Moscow Art Theater in 1898 marked the beginning of a new era in Chekhov's work.

Chekhov's work consists of three periods:

1. The period up to the mid-80s;
2. The period from the mid-80s to the early 90s;
3. The period from the early 90s to the death of the writer.

Although in the early days of Chekhov's work he wrote works based on the tastes and orders of various publishers, the main themes of the writer's work began to emerge. Chekhov's stories such as "Fat and Lean", "Death of an Official", "Buqalamun", "Mask", "UnterPrishibeev", etc. demonstrates perfect mastery. He skillfully uses satire in his works, and the reader who reads it is involuntarily laughed at. Concerning Chekhov's use of satire in his stories, I. Gurvich said:

"He causes laughter not by some oddities or whims, but, on the contrary, by his generally ordinary actions. It's funny, but usually not anecdotal, it makes you laugh, but it's not amazing, it's not amazing. The more significant the question: what are we laughing at."

III. Analysis

Chekhov describes the situation in the story in such a way that everything seems natural, but behind

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this natural laughter there is a certain meaning. With this humor, he exposes the problems that plague society, the actions of officials who abuse the interests of the people.

In the 2nd period of Chekhov's work, the central theme of the writer acquires clear edges. It is not the mental world of the protagonist and even the course of events that is at stake, but the impact of social relations and domestic conflicts on the character of the protagonist. This issue is first of all reflected in Chekhov's The Gangster (1898). In this play, the sheath becomes a symbol of life based on lies and oppression, on someone living a life of luxury and suffering.

The principles of this period of Chekhov's work are characterized by a new artistic power in the 3rd period. Chekhov's short stories "The Upstairs House", "My Life", "Ionich", "The Lady Led by Laycha" and others tell the story of the inner world of Russian society at that time. In these works, the theme of human indifference is explored not only spiritually and psychologically, but also socially. Chekhov constantly examines his protagonist's ability to awaken spiritually, to resist the environment, to rebuild his life, looking at different strata and social strata.

Chekhov's work in the field of drama had a great influence on the development of Russian theater. The theme of the lack of spiritual connection between the people reflected in the author's prose works is also interpreted differently in his plays. Chekhov's best prose works and plays have been translated into Uzbek. All his famous plays have been staged in Uzbek and Russian theaters throughout the country.

Chekhov had a significant influence on the development of world literature with his prose and drama. Chekhov's traditions also served as a factor in the emergence of the genre of realistic storytelling in Uzbek literature and in the formation of the work of storytellers Abdulla Qodiri, Cholpon, Abdulla Qahhor. Chekhov is also an artist who, in his stories, is able to depict the real picture of Russian life in a way that is as it should be, without interfering with reality. Every work of a writer is a living part of his people, his nation, his homeland. His work is a perfect, profound portrait of Russia. But through these images, the writer leads the reader not only to Russia, but also to the deep boundaries of the spiritual world of mankind, the soul, creating instructions for its inspection. V. Yermilov said about Chekhov's work:

"Chekhov was a great artist who could paint images and real-life situations with great skill. This skill helped him to create deep, wide and weighty stories with a very small but ideological and artistic content. Chekhov was a great artist in the writing of short stories of world literature, able to create perfect artistic types with the help of a few sharp details and strokes, the necessary conditions for the plot". (Translated by A. Urazayev and H. Muhamedkhanov)

The ideas put forward by the author, the goals of his work are universal. It loses the notion of nation, space and time. They begin to generalize, unite, and integrate and serve to understand the nature of the universe and man.

IV. Discussion

What is important is that the rise to such a status is provided by the author's unique style of creating works, cast, concise prose, unique skills. Abdullah Qahhor's above-mentioned article describes the mastery of creativity: "Two lines can express the idea of a poem in a thousand ways, but none of these thousand variants is as simple, short, powerful and effective as these two lines, will not happen". The same can be said of Chekhov's prose. When we read his works, we see how clear and understandable each sentence is. We are convinced that the situation in the work, the images of nature, the character of the images can't be expressed more clearly, more convincingly, more effectively, more differently. The author has created a unique, Chekhov's style with his work. In this way, he was able to follow in the footsteps of many representatives of world literature and create a stable place for himself in the vast field of world literature. "This is how Chekhov became a great storyteller in the history of world literature. With this new form he created, he may have had a great influence on Russian European and American writers. "I. Gurvich spoke about Chekhov's mastery and his great work:

"Chekhov had a powerful impact on the development of a twentieth-century story. And today the Chekhov tradition is one of the most productive. Chekhov's discoveries were included in the arsenal of world art; they are actively absorbed by modern foreign short stories. Time has shown: Chekhov and artistic progress are inseparable".

According to Gurvich, Chekhov made a significant contribution to the development of the story genre in the 20th century. Moreover, the study and continuation of Chekhov's tradition of storytelling in storytelling has not lost its value even today.

The roads would be behind us,
The deserts would be endless, unique.
Why do they say infinite,
Abdullah Qahhor passed by here.
Abdulla Oripov

People's writer of Uzbekistan, writer Abdullah Qahhor, who made an invaluable contribution to the development of Uzbek literature and art, created immortal works about the life of the Uzbek people, the inner and spiritual world of man. He is one of the leading writers of Uzbek prose of the 20th century. Abdullah Qahhor is not only a great writer who entered literature as a poet and later a storyteller, but also a publicist, short story and novelist, satirical comedian and lyric playwright, journalist and translator, and word artist.

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The great writer, poet, writer, playwright, translator Abdulla Qahhor, who made a significant contribution to the development of Uzbek literature of the twentieth century, was born on September 17, 1907 in Kokand in the family of a blacksmith.

The family where Abdullah Qahhor was born and raised has experienced the horrors of a difficult life. His father, Abdukakhor Jalilov, made a living as a blacksmith. The family moved to the surrounding villages of Kokand to earn a living. Abdullah's childhood was spent in villages around Kokand, such as Yaypan, Nursukh, Buvayda, and Olkar. When he was ten years old, he went to the old school in Buvayda, where he studied at the MamajonQori Method Savtiya school in the village of Akkurgan. After his family moved to Kokand, he continued his education at the Istiqlol school. From there he studied at a boarding school, Kommuna, Namuna schools, and then at an educational institution.

Abdullah Qahhor will take part in the first rehearsals of the Adib manuscript magazine of the university. He is the editor of the "Ishchi-BatrakMaktublari" page of the Tashkent Red Crescent newspaper. In 1925, while working for a newspaper, he graduated from the Central Asian State University, Faculty of Labor.

Abdullah Qahhor will return to Kokand to teach teacher retraining. He was soon appointed secretary of the regional newspaper "Yangi Fergana" and director of the comedy department "Chigirik". Abdullah Qahhor began his literary career as a poet. His first comic poem "When the Moon Burns" was published in 1924 in the magazine "Mushtum" under the pseudonym "Norin shilpiq". Later, some of his humorous poems and stories were published in magazines "Mushtum", "Yangi Yol" and the newspaper "Kizil O'zbekiston" under the pseudonyms Mavlon Kufur, Gulyor, Erkaboy, Evoy.

Abdullah Qahhor returned to Tashkent in the 1930s and entered the pedagogical faculty of the Central Asian State University. The writer was then the executive secretary of the Soviet Literature magazine. He later worked as an editor and translator at Uzdavnashr (1935-1953), and from 1954-56 as chairman of the board of the Writers' Union of Uzbekistan.

Abdullah Qahhor's works have been translated into Russian, Armenian, Belarusian, Georgian, Latvian, Lithuanian, Moldovan, Azerbaijani, Tatar, Tajik, Tuvan, Turkmen, Uyghur, Ukrainian, Chechen, Karakalpak, Kyrgyz, Kazakh, and Estonian. Some of his stories have been published in English, Arabic, Bengali, Bulgarian, Vietnamese, Spanish, Mongolian, German, Polish, Romanian, French and Persian.

Our great writer died on May 25, 1968, at the age of 61, at a time when his creative source was in full swing. He has written and is writing PhD and doctoral dissertations on the work of Abdullah Qahhor, and has published a number of major monographs, critical and biographical pamphlets. In particular, H.Abdusamatov's "Abdulla Qahhor", M.Sultanova's "Some issues of Abdulla Qahhor's style", "On the writer's style", M.Kushjanov, U.Normatov's "Secrets of mastery", M.Kushjanov's "Life and sophistication ","Satire and humor in the works of Abdulla Qahhor "," Abdulla Qahhor's mastery "," Abdulla Qahhor "by O.Sharafitdinov," Abdulla Qahhor and Hamza Theater "by N.Rahimjanov," Nezabyvaemyevstrechi, literaturnyebesedy "by L.Bat .Barolina's "Abdulla Kaxxar", M.Agatov's "On the author of your book of literary compositions on the materials of critical and memoir literature", V.Oskotsky's "Negasimoeplamyakostra", M.Bekjanova's "Development of satirical works of Abdulla's ancient traditions" created.

V.Conclusion

The author's poems "My Grandmothers", "Painful Teeth", "Shohi Sozana", "Sound from the Coffin" were created and staged. A film based on the story "Sinchalak" has been made.

Abdulla Qahhor was awarded the People's Writer of Uzbekistan (1967) for his services in the field of literature, the State Prize, and the Order of Great Merits during the years of independence. Abdullah Qahhor has made a significant contribution to the further development of the culture of the Uzbek people with his colorful work and his work as a great artist. In 1987, the Abdullah Qahhor House-Museum was established in the house where the writer lived. Today, it is named after several streets, schools and public facilities in Tashkent and Kokand, as well as houses of culture and the Republican Satire Theater. Abdullah Qahhor, who began his career writing poetry, has done a great service in developing the genre of short story, which is just beginning to emerge. It further enriched it with deep content and highly artistic imagery methods. He raised the genre, which he left behind with his stories. He reached out to other genres. It has a strong place in literature and will remain in history forever. By the 1930s, the writer's talent in this field was flourishing. His best stories occurred during this period. Powerful, popular stories began to be presented to readers one after another. "Headless Man", "Opening the Blind Eye", "Pomegranate", "Sick", "Thief", "Woman Who Didn't Eat Raisins", "Literature Teacher", "Artist", "Hypocrite" "Have emerged as perfect examples of short storytelling.

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QR – Issue   QR – Article

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ENHANCEMENT TREATMENTS OF METHODS OF RADICULAR CYSTS OF JAW

Abstract: The experience of surgical treatment of 36 patients hospitalized for small in size radicular cysts of the upper and lower jaws is presented. After the operation of cyst ectomy in the main group of patients, the residual bone cavity was filled with osteoplastic drug "Kollapan" and platelet-rich fibrin, which showed significant advantages over traditional methods of treatment of radicular jaw cysts.

Key words: radicular cysts of jaws, osteoplastic drug, residual bone cavity.
Language: English
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Scopus ASCC: 2700.

Introduction

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Jaw cysts take first place among other odontogenic formations. They are found in people of different ages, are formed on the upper jaw 3 times more often than on the lower. In the outpatient practice of surgical dentistry, radicular cysts make up 78-96% of the total number of cysts and 7-12% of the total number of diseases of the jaw. These figures indicate the relevance of the treatment of this pathology. [1,4].

The priority tasks of surgical treatment of patients with radicular cysts are restoration of bone structure and preservation of dental functions. The main method of surgical treatment remains cystectomy with resection of the root apex. [6].The disadvantages of the Parch-II cystectomy technique include a decrease in the function of teeth located in the area of the cyst, reinfection and residual bone cavities that reduce bone strength. Violation of the integrity of the bone in the area of surgical intervention is often associated with prolonged healing, the outcome of which is incomplete or inferior restoration of bone tissue. [2].

II.Literature review

Enhancement in the methods of surgical treatment of radicular cysts can lead to a significant decrease in indications for the removal of causative teeth. One solution to this problem is to fill in the residual cystic cavities with bone-plastic materials. Their active use involves reducing the postoperative period, strengthening the teeth involved in the cystic process, reducing complications and accelerating bone maturation. But clinical experience has shown the low efficiency of some materials, especially with significant sizes of bone defects, since they are not always completely replaced by bone, but are encapsulated by connective tissue, support chronic inflammation, enhance bone resorption or are partially rejected. [5]

In this regard, the choice of such a treatment method that uses materials that meet modern requirements is of particular importance. Osteoplastic preparations should have such parameters as the absence of toxicity, bacterial and viral safety, full

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biodegradability, biocompatibility, a combination of the properties of osteoconductivity and osteoinductance. [6]

One of the directions in the reconstructive surgery of the jaw bone tissue is the use of platelet-rich plasma, which has a combined reparative effect on hard and soft tissues due to the activated platelets contained in it with growth factors, fibrin and white blood cells and does not cause toxic or immune reactions. The peculiarity of using osteogenesis optimization tools is that they show their positive qualities at certain stages of bone restoration. [3]. Therefore, the combined use of biocomposite osteoplastic materials and platelet-rich autoplasma suggests the creation of optimal conditions for bone formation by reducing the inflammatory response of tissues and effective influence on the mechanisms of ossification.

The aim of this study was to optimize the methods of surgical treatment of radicular cysts by using the biocomposite material "Kollapan" and platelet-rich fibrin to fill a postoperative bone defect.

III.Analysis

The results of surgical treatment in 36 patients after cystectomy of the radicular cysts of the upper and lower jaws were analyzed.Patients were treated in the Department of Maxillofacial Surgery of the Bukhara Multidisciplinary Medical Center, which is the clinical base of the Department of Surgical Dentistry of BSMI. Patients were between the ages of 25 and 45, of which 24 were men and 12 were women. All patients, depending on the method of treatment, were divided into two groups: the first - the control group included 22 patients, of which 15 were men and 7 women received traditional treatment - cystectomy with resection of the root apex; the second - the main group consisted of 14 patients, of which 9 were men and 5 were women who were treated in a complex manner. The last group of patients after cystectomy did not undergo resection of the root apex, and the residual bone cavity was filled with biocomposite material "Kollapan" and platelet-rich fibrin.

In photographs 1. and 2. the stages of cystectomy and filling of the residual bone cavity with Kollapan granules are fixed. Patient M. 38 years old.

As antibiotic therapy, all patients were injected intramuscularly with cefazolin injections of 1.0 gram 3 times a day with an interval of 8 hours. All patients, regardless of the treatment, spent 10 days sparing hygiene in the postoperative area and frequent rinsing of the oral cavity with furacilin solution. An antihistamine "Tavegil" (0.001 g) was prescribed, 1 tablet at night and, in the presence of pain, the analgesic drug "Ketonal", 1 ml intramuscularly. In the area of sutures, patients were recommended to apply the application of "Solcoseryl" dental adhesive paste 2-3 times a day on their own.

Photo 3. View of the postoperative wound after suturing.

IV. Discussion

In patients of the control group, in whom, after cystectomy with resection of the root apex, the residual bone cavity was filled with turunda with an antibiotic, the bone defect was eliminated within 45-50 days. In patients of the second group, due to the use of the biocomposite material "Kollapan" in the postoperative period and fibrin enriched with platelets, a positive clinical effect was achieved already on the 25-30th day after surgery in the form of no signs of inflammation and complete replacement of the residual cavity with full bone tissue.

The combined use of biocomposite osteoplastic materials and platelet-rich autoplasma suggests the creation of optimal conditions for bone formation by reducing the inflammatory response of tissues and effective effect on the mechanisms of ossification. The use of the studied complex treatment in the wide practice of surgical dentistry will increase the effectiveness of treatment of patients with radicular cysts, reduce the recovery time of postoperative bone defects of the jaw bones. According to clinical research methods, it was found that the use of osteoplastic material "Kollapan" and platelet-rich fibrin to fill a postoperative bone defect reduces the severity of pain and postoperative collateral soft tissue edema, and reduces the time of wound epithelization. According to the X-ray examination, an acceleration of the process of restoration of bone beams in the postoperative defect was revealed. After 6 months, mature bone tissue was determined in the postoperative bone defect.

A cystectomy in patients with jaw radicular cysts performed by the traditional method reduces the activity of secretory and cellular mechanisms of local immunity in the oral cavity with a complete restoration of the initial parameters a month after the operation.

V. Conclusion

A cystectomy using osteoplastic material "Kollapan" and platelet-rich fibrin stimulates the activity of secretory and cellular mechanisms of local protection, increasing the number of functionally active neutrophils in the oral cavity with their high phagocytic ability. In addition, this contributed to an increase in the number of immunoglobulin-producing lymphocytes in the oral cavity, which prevented the immunosuppressive effect of surgery.

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EXPERIMENTAL CHRONIC TOXIC HEPATITIS AND HEMATOLOGICAL FEATURES IN THE DYNAMICS OF LACTATION IN MOTHER AND PROPERTY

Abstract: *The purpose of the study was to study the occurrence of autoimmune processes in chronic heliotrin hepatitis and its effect on the hematological parameters of mother and offspring in the dynamics of lactation.*

The work was carried out on white outbred female rats, which were studied after heliotrin intoxication before pregnancy, the presence of antihepatic antibodies in female rats was carried out by passive hemagglutination by the Boyden method, as well as hematological parameters in mother and offspring in lactation dynamics by generally accepted methods. The presence of antihepatocytic autoantibodies during lactation, mainly in the blood serum, and in small quantities in the milk of female rats was established, therefore, antihepatic antibodies of the mother with toxic hepatitis are not a pathological agent for the offspring during breastfeeding. In the body of female rats and offspring anemia occurs, progressing until the second week of lactation, that is, the transition of the cubs to a mixed diet, therefore, it is more advisable to carry out therapeutic measures before this period.

Key words: *chronic hepatitis, lactation, mother, offspring, antihepatic antibodies, anemia.*

Language: *English*

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Introduction

It is known that the normal development of the child depends on the process of conception, i.e. from the gene pool of X and Y chromosomes of both parents, it is then directly related to the state of the mother's body during pregnancy and breastfeeding. That is, the growth and development of the future newborn in the embryonic and fetal periods of development depends on the full functioning of the mother - placenta - fetus system, then after birth this scheme changes to mother - mammary gland - newborn. Consequently, the adaptation of developing offspring to environmental factors begins even in the embryonic period of development, where immunoglobulins, hormones and bioactive substances begin to flow through the placenta along with the necessary nutrients. And yet, man, like many types of mammals, brings unripe offspring, the formation and functioning of the life support systems of which occurs further during breastfeeding. However, this harmonious system of relations between the mother and the offspring is violated in case of illnesses of the mother.

It should be noted that the frequency of various extragenital pathologies in women of childbearing age is still significant. First of all, the risk of chronic damage to the hepatobiliary system increases as a result of transferred viral or toxic hepatitis, which under the influence of adverse environmental conditions often take a chronic, protracted form [3, 4]. It should also be noted that in multiparous women, there is also a high risk of hepatobiliary pathology. The possibility of transmission of hepatitis virus from HbsAg carriers to newborns, the development of persistence of HbsAg in some children, and the formation of primary chronic hepatitis is beyond doubt [5, 8]. In particular, experimental studies have established that chronic intoxication with heliotrin contributes to the onset of interstitial hepatitis, which subsequently progresses to liver cirrhosis [4]. Along with this, in recent years, with heliotrin intoxication, the presence of microcirculatory disorders was also

detected in other organs, which indicates the presence of interorgan and intersystem relationships in the body of experimental animals [1]. One of the liquid media that binds the body into a single system is blood, in which "its general condition is reflected in a mirror". At the same time, the importance of autoimmune processes unfolding in the mother's body with hepatitis, in the dynamics of lactation and their effect on the development of offspring during breastfeeding and how they affect the hematological parameters of the mother and offspring, are still poorly understood.

The aim of our study was to study the effect of chronic heliotrin intoxication of female rats before pregnancy on autoimmune processes in the mother's body and on the hematological parameters of mother and offspring and in the dynamics of lactation.

II. Literature review

For the experiment, 3-month-old sexually mature white outbred female rats (72) weighing 120-140 grams were used. The animals were kept on a normal laboratory diet and were quarantined for two weeks before the experiment. As a model of hepatitis, we used chronic heliotrin intoxication [1]. After quarantine, the females of the experimental group (O) were injected with heliotrin at a dose of 0.05 mg / gram body weight per 0.5 ml of physiological saline subcutaneously weekly for 6 weeks, the animals of the control group (K) were injected only with saline. 10 days after the last injection, males were planted in the females. For the study, females of the experimental (40) and control groups (32) on 1, 3, 7, 15, 21, and 30 days of lactation were selected. The determination of antihepatocytic antibodies was carried out by RPHA according to the Boyden method. To carry out serological reactions, we used blood serum (0.5 ml) and milk samples (0.2 ml) taken from female rats in the above study periods. The sheep erythrocytes were prepared according to the generally accepted method. A 2.0 g sample of the liver of an intact female rat was used as antigen, the preparation of which was carried out by water-chloroform extraction according to the method of T. A. Alekseeva [8]. The antigen content was controlled by the amount of protein, which was adjusted to 1%. For a more accurate calculation and convenience in comparison, the results were expressed in log2 [7]. For the study, the blood of females from the control and experimental groups was used, as well as their rat pups on days 1, 3, 7, 14, 21,

and 30 of lactation. The following hematological parameters were studied in the work: the amount of hemoglobin (Hb in gram%) according to the generally accepted method using a Salihemometer, the total number of red blood cells (x1012 / l) and white blood cells (x109 / l) using a Goryaev's camera. The data obtained were processed according to Fisher-Student, reliable differences were considered reliable satisfying P <0.05.

III. Analysis

As a result of our study, a certain dynamics of changes in the titer of antihepatocytic antibodies of blood and milk of rats with toxic hepatitis in the dynamics of lactation was established. Autoantibodies reaching a titer of 1: 128 are found in the blood serum of females of the experimental group immediately after birth, this trend persists up to 3 days of lactation, while in the control group of animals the titer of autoantibodies is 1: 8 and 1: 4 for 1 and 3 days after childbirth, respectively. In the subsequent periods of lactation, serum in a dilution of 1:64 was found to be seropositive until the end of the lactation period. In contrast, in the control group, antibodies were detected in females only up to 7 days of breastfeeding, not exceeding a titer of 1: 4, in the subsequent periods of lactation only traces were observed.

In contrast to blood serum, in a serological study of milk samples of females of the experimental group on days 1-7 after delivery, autoantibodies were determined in a 1: 8 dilution. In subsequent periods, antihepatic antibodies were not always detected even at a 1: 4 dilution. In the control group, the indicators of serological studies of milk during breastfeeding did not reveal significant differences from the experimental group.

To conduct more accurate studies and the possibility of comparing changes in the titer of antihepatocytic antibodies in the blood serum and milk of female rats during lactation, the results of serological studies were expressed in log2 (see Table). According to these data, with toxic heliotrin hepatitis, the appearance of autoantibodies against the liver is characteristic only of blood serum, which are present until the end of the period of breastfeeding. While in milk samples obtained from females with toxic hepatitis, an insignificant titer of autoantibodies was not significantly different from those in females of the control group.

Table 1. Changes in the activity of antihepatic antibodies in the blood and milk of female rats with chronic heliotrin intoxication in the dynamics of lactation

(data expressed in log2, M ± m)

Researched Material	Gr. wx	Duration of lactation (in days)				
		1	3	7	14	21
Blood	K	1,68±0,158	0,75±0,161	0,68±0,149	0,48±0,142	0,33±0,104
	O	6,03±0,089*	5,45±0,127*	5,10± 0,114*	4,90±0,120*	4,73±0,114*

| Milk | K | 1,60±0,206 | 1,48±0,089 | 1,30±0,082 | 0,83±0,196 | 0,78±0,164 |
| | O | 3,75±0,133 | 3,45±0,158 | 3,43±0,212 | 2,00±0,199 | 1,95±0,225 |

*Note: * - differences are significant relative to control at P <0.05*

Chronic heliotrin hepatitis also contributes to the occurrence of certain changes in hematological parameters, both in the females themselves and in their offspring (see Tables 2 and 3). In female rats, a significant decrease in the amount of hemoglobin is observed starting from the first week after childbirth and up to 14 days of lactation. Although from the first days of lactation there is a relative decrease in the number of red blood cells of females of the experimental group than in the control, a significant decrease in the number of red blood cells becomes only on the 14th day of lactation.

Table 2. The effect of toxic hepatitis on the hematological parameters of female rats in the dynamics of lactation (M ± m, n = 10)

The investigated parameters	Gr. wx	Duration of lactation (in days)					
		1	3	7	14	21	30
Hbingram%	K	11,2± 0,02	11,2± 0,03	11,1± 0,09	11,0± 0,01	11,2± 0,17	11,8±0,05
	O	10,8± 0,29	10,8± 0,25	10,7±0,12*	10,6±0,22*	10,9± 0,25	11,4±0,33
Red blood cells x10^9 / l	K	5,28± 0,11	5,21± 0,05	5,20± 0,08	5,13± 0,06	5,23± 0,11	5,41±0,08
	O	5,00± 0,12	4,90± 0,15	4,85± 0,20	4,78±0,09*	5,15± 0,17	5,3±0,14
White blood cells x10^6 / l	K	9,21± 0,17	9,06± 0,05	9,44± 0,21	9,60± 0,24	9,61± 0,16	9,72±0,15
	O	8,42±0,28*	8,21±0,18*	8,43±0,26*	8,71±0,29*	9,11±0,36	9,20±0,38

Table 3. The effect of toxic hepatitis in female rats on the change in hematological parameters of the offspring in the dynamics of early postnatal ontogenesis
(M ± m, n = 10)

The investigated parameters	Gr. wx	Dates of postnatal development (in days)					
		1	3	7	14	21	30
Hbingram%	K	10,2±0,08	9,5±0,06	9,5±0,03	9,3±0,05	9,1±0,07	8,9±0,12
	O	9,1±0,10*	9,1±0,07*	9,0±0,06*	8,9±0,08*	8,8±0,18	8,8±0,17
Redbloodcells x10^9 / l	K	3,65±0,05	3,25±0,05	3,30±0,04	3,35± 0,05	3,56±0,05	3,82±0,06
	O	3,25±0,14*	3,02±0,05*	3,01±0,03*	2,90±0,07*	3,16±0,22	3,60±0,18
White blood cells x10 / l	K	12,62±0,16	9,96±0.03	9,70±0,08	9,29±0,10	9,10±0,15	9,02±0.08
	O	11,02±0,08*	8,76±0,13*	8,61±0,08*	8,91±0,16	8,80±0,64	8,92±0,46

In the study of the total number of leukocytes, leukopenia was established, which stably lasts up to 14 days of lactation. In the subsequent periods of lactation, a relative normalization of hematological parameters is noted.

The study of blood parameters of rat pups in the dynamics of early postnatal ontogenesis revealed that in the body of newborns of the experimental group there is a decrease in the amount of hemoglobin and erythropenia, which lasts up to 14 days after birth. A decrease in the total number of leukocytes noted in rat pups on the 1st day after birth remains up to 7 days of development. On days 21 and 30, blood indices are approaching the lower boundary of the data of the rat pups in the control group.

IV. Discussion

It is known that chronic heliotrin intoxication leads to the onset of toxic hepatitis, which generally tends to progress, i.e. is a model of aggressive chronic hepatitis [1]. With active forms of hepatitis, changes in the immune status occur, in particular, profound changes in the T- and B-systems of immunity are noted and an increase in the titer of immunoglobulins of various classes, an increase in the gamma fraction of globulins, are the criteria for assessing the activity of a developing pathological process. In cases of the transition of the process to a chronic form against the background of a slight decrease in T-helpers, the number of T-suppressors (killers) is significantly reduced, which contributes to the formation of antihepatic antibodies and activation of the pathological process [3,9]. Along with this, we believe that a violation of the detoxification function of the mother's liver is of great importance. The fetal liver is not yet ready for sufficient detoxification of metabolic products. It is clear that, in this case, the accumulation in tissues, including the liver, of substances that have

a cytotoxic effect is possible. Another cause of pathological changes in the offspring, apparently, is certain immunopathological changes in the body, since the protein products of decaying hepatocytes cause an autoallergic reaction. In particular, the results of our study once again showed that heliotrinal intoxication of female rats before pregnancy is a trigger for an auto-allergic process that progresses over time. Along with this, the relatively low titers of antihepatic antibodies in the blood serum are apparently associated with changes in the mother's body in the dynamics of pregnancy and lactation, stimulating regeneration processes. The almost double excess of the titer of autoantibodies immediately after birth, relative to the further period of lactation (1: 128 on 1 day and 1:64 in the subsequent periods of lactation), is possibly due to the effect of the fetus, which is alien to the mother's body and, of course, the loss of the immunosuppressive effects of placental hormones during pregnancy, which ceased to act after childbirth.

When comparing the results of hematological studies of the blood of females with chronic heliotrin intoxication and their offspring with the literature data, we can assume that the deep metabolic changes that occur in the mother's body with toxic hepatitis, in particular, impaired protein-vitamin metabolism, as well as liver detoxification function [1,4] contribute to the occurrence of anemia, not only in the mother, but also in the offspring. The progression of anemia in the female's body on the 14th day of lactation is apparently associated with the growth of rat pups and an increase in the need for milk, and consequently, the stress of the mother's body. The immunodeficiency

state of the mother with hepatitis leads to the fact that her milk does not completely eliminate the immunodeficiency in the body of the offspring [2], which is probably due to leukopenia in rat pups. The transition of calves to mixed nutrition, on the one hand, helps to reduce the burden on the mother's body, and on the other hand, reduces the intake of hepatotoxins [3] and antihepatic antibodies [5] in the rat pups, and as a result, the blood parameters of the mother and offspring are relatively normal at the end of the period of breastfeeding.

Thus, antihepatic antibodies are determined in the blood of female rats with toxic hepatitis after childbirth and in the dynamics of lactation, but during breastfeeding, they are transmitted to rat pups through milk in small quantities and, most likely, are not the main cause of the lag of the formation of the digestive and immune systems offspring. Along with this, with chronic heliotrin hepatitis, both in the mother's body and in the offspring, anemia is detected that progresses before the rat pups switch to a mixed diet, therefore, therapeutic measures would be more effective until this period of development.

V.Conclusion

1. In chronic toxic hepatitis, autoimmune hepatitis occurs in the body of a lactating female, as evidenced by the presence of antihepatocytic antibodies in the blood serum. Minor amounts of antibodies in milk indicate that they are not the main pathological factor for the baby.

2. In chronic hepatitis, anemia occurs, both in the body of female rats and in offspring, which progresses before the rats switch to a mixed diet.

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METHODOLOGY OF TEACHING PROGRAMMING TECHNOLOGY

Abstract: The purpose of the teaching of "Fundamentals of Informatics and Computer Engineering" in general secondary education is to teach students information processing technologies and from providing them with a thorough knowledge of the processes of their use computers wisely in learning and post-work activities from imparting skills and competencies to new information based on them about the contribution of technology to the development of our country is to create imagination.

Key words: Computer Engineering, technologies, processes, new information, computer technology, Computer science, Pascal programming language.

Language: English

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Introduction

One of the main tasks of education is to teach students to solve problems on the computer technology and its main stages. That's it 9th grade in general secondary education "Computer science and computer engineering Basics programming language was used in the course "Fundamentals". Until today that the developed programming languages are widespread and widely used Pascal programming language has been included in the textbook since the 2006 academic year. Although the Pascal programming language was developed to teach programming, common among highly qualified programmers.

Pascal programming language is the second in the 9th grade of secondary schools taught in the chapter. It consists of a total of 38 lessons. The question is general education How effective is it to teach students in school? I have it first we teach lessons from modern educational technologies as well as multimedia lessons are more efficient when organized using.

II.Literature review
From multimedia technologies in teaching programming languages use

Many authors are strategic to use new ones in teaching computer science emphasize the importance of problems of computerization of education special conferences are being organized. Multimedia in education, the most important thing is to use the tools.

Multimedia is a multimedia information technology tool (MIT) one of the various channels of information exchange between the computer and the user allows you to use it on time. Because multimedia is in the process of learning activates all data channels, all types of memory uses to the maximum extent.

Number of articles on computer education topics is growing in publishing, scientific communities in information technology and educations are considering the interaction of the process.

Use the computer as a learning tool or interactive expert dedicated bans are in place. Many schools have multimedia education using the latest generation of computers equipped with tools in fact, despite the cost of using computers in education the quality of data transmission, its updates and additions cheap to use a computer as a library, audio-video, no doubt covers ten times the initial cost.

Enthusiasm is the use of multimedia by teachers in computer science they develop lessons

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independently but teach computer science at school because teaching requires a multimedia-based, effective methodology it is necessary to solve the problem of knowledge in the field of modern informatics. Basics of programming are common in their practice principles of demonstration and delivery of lessons in teaching programming languages implementation problems. The cause of these problems is visual the ineffectiveness of traditional means of exhibition is their low dynamics is observed, which makes the material better by the students interferes with assimilation.

Humanization of education for the development of educational institutions and differentiation properties. Multimedia learning process leading to increased individualization of teaching will come.

On the other hand, along with the continuous development of the science of the basics of programming the scientific principle requires that the content of programming education be constantly analyzed does. Electronic data to solve this problem quickly and easily carriers and the use of modern telecommunications suitable.

Principles of multimedia teaching are often programmed teaching theory, so the problem is broader let's see The idea of programmed learning originated in the United States in the 1950s Its author is Professor B.F. Skinper (Department of Psychology) specialist) to teach the effectiveness of the management of the educational process by viewing the proposal in full accordance with the scientific data on the process entered. The first programmed training in our country scientific works are known by A.A. Abdukadirov, N.I. Taylakov, K.T. Olimov made.

III.Analysis

Ideas for programmed learning for former union educators and scholars attracted. In these ideas, they are relevant to the Union School saw potential opportunities to solve problems. In the spring of 1962 American version of the teaching ideas programmed at the UNESCO conference the former, dominated by the ideas, views, and experiences of psychologists and educators new pedagogical ideas of programmed teaching in the union country coincided with the beginning of the development of Soviet cybernetics and it included the ideas and methods of cybernetics, logic, statistics in pedagogy due to the arrival of they can control the whole pedagogical process opened the way to look at it from a system perspective, and at the same time most of it helped to identify the subtleties. Teaching optimization problem research is a clear statistical method of analyzing the learning process led to its widespread use in pedagogy. These methods are teacher and student objective in relation to the extent to which the goal is achieved allowed views.

There are a number of achievements in programmed learning: individualization and differentiation learning. The scientific organization of

process management and, consequently, its increase efficiency. Multimedia education has led to similar success allows us to predict. The essence of programmed learning review and improve the content and structure of the study material There are a number of questions that need to be considered. These questions are part of the learning process to optimize, to program to manage it, to study it and helps to optimize learning methods. In programmed learning, all elements of the learning process are scientific requires validity. Because teaching is about the student and the teacher the process of interrelated activities, to determine the direct connection in it possible. Direct contact during the learning process and in the education of students will be installed. Feedback is the quality, depth, helps to obtain information about the strength of Basics of learning programming languages from multimedia technologies It is advisable to use Ashampoo Snap and AutoPlay Media Studio suitable.

Ashampoo Snap is a comprehensive audio-visual application files: demonstrations, presentations, audio-visual, the guide is used to create lesson slides. Basic Functions:

• Record audio and audio-visual guide files from the screen;

• Editing, project creation;

• Write to disk;

• Use AVI, FLV, PPT file formats.

Ashampoo Snap software moves on the computer screen, from the microphone record audio and audio-visual guide files that computers can understand format. One of these tools is Ashampoo Snap interface, many formats, a variety of audio-visual guide files marking and commenting, as well as creating audio files using the program possible. Highlight the desired area of the screen while writing a lesson possibility is also available. These are just some of the goal setting shareware that you can use Ashampoo Snap software was chosen as the authoring program.

Ashampoo Snap Software Classification. Ashampoo Snap is on display used to maintain processes. The program consists of four auxiliary parts consists of:

• Menu Maker;

• Player;

• Theater;

• Recorder.

The main part of the program is undoubtedly Ashampoo Snap Recorder. All lessons were created using this very program. Ashampoo Snap software at the bottom of the window is a desktop called a timeline Perform various operations on audio and audio-visual guide files possible. These include linking files together and cutting out unnecessary parts throwing etc. In the center of the main window, the program could run. There is a "Clip Bin" section that lists the files. These files can be viewed in the audio-

visual guide player on the right. This tiny Ashampoo Snap Player only performs one function — AVI displays files. Finding the right one among the various subjects in the education system can cause difficulty for the user to navigate. You will need to create a menu. Such a navigation interface is AutoPlay Media Can be created using Studio software. Visual using this program perfect navigation using objects. In the interface each page that is created looks like a web page, you can set different actions on the objects on the pages.

Autoplay Media Studio - Bring any file or set of files to a single environment merge, as well as create an Autorun menu for CDs or DVDs Autoplay Media audio is the most powerful visual package. Multimedia Autoplay Media to create applications based on technology studio software is very easy and convenient for users to use provides an interface.

IV.Discussion

Working with Autoplay Media Studio requires almost no programming. The user is just one to choose a different design software environment can use project templates in multiple ready-made forms. In this Autoplay software to make the application environment rich in design tool contains ready-made objects, including the command button, amplifier, which allows you to print files from a printer a tool that opens and accesses Web sites you can enter a number of functional objects. Graph for applications Autoplay Media Studio for creating shells and launching it automatically creates all the necessary files. And the users are just tough the task of forming ready-made projects for writing discs and compact discs remains. On March 12, 2008, Indigo Rose Corporation launched Autoplay Media Studio has released version 7.1.

Autoplay Media Studio software environment Visual Basic, Visual C ++, Java, Documents created on a number of systems, such as Macromedia Flash, can also be easily reproduced can work. Software animated menus, directories tree, database, and the like you can not only create but also manage them. Auto start windows are optional using the "masks" in its library can be created in the form (form). Such as "mask" .jpg, .bmp and .png You can also use files in formats such as Also, the data is on a CD be able to burn it to a CD or DVD without having to program it See how wide the capabilities of Autoplay Media Studio are shows. The finished project opens automatically as a file with an .exe extension, the archive can be created in view or in a separate folder on the hard disk. The program also includes the ability to spell check text. This feature of the program is its objects such as Label, Paragraph and Button works together. If the program is installed on the computer with the full version is too large in his library to spell check the text dictionaries. Thus, AutoPlay Media

Studio 7.0 The new version of has been released with the following features:

1. Automatic start menu, interactive presentations, multi-media applications, create software in minutes;

2. Various photography, music, video, animation, text and the ability to attach others;

3. Advanced tools for creating web applications;

4. Ability to work with XML, SQL and encryption mechanisms;

5. Ability to work with RTF-format documents;

6. Ability to work with slide-show;

7. Available RadioButton to change the color of the text;

8. Extended printing function;

9. Ability to format objects;

10. Availability of search engine using keywords;

11. Ability to burn to CDs, DVDs, etc.

Writing scripts in AutoPlay. If in the workspace (more on the page) using the properties panel to perform a function that an object must perform, If we want to define, then only one function is attached to one object, just but in real conditions, a single object must perform more than one function may be born. Properties to get out of a situation in such conditions cancel the selected function from the panel and separately for each function, It would be useful to write scripts. For example, one put audio music on one page and turn off music when you go to another page the script for his own Show event can be written as follows:

AudioLoad (0, "AutoPlay // Audio // 01.ogg", true, false); In this case: true - if the page opens, the audio will play, and false this audio will not continue when you move to another page or indicates that it will not be repeated.

The page may also contain a Tree object. It is case to run its networks when using this Tree object the following scenario can be written:

If Tree.GetNode("Tree1", "1.1").Selectedthen
Page.Jump("PgWebMavzu1");
elseif Tree.GetNode("Tree1", "1.2").Selected then
Page.Jump("PgWebTest");
End

In this scenario, line 1 of the Tree object is in the 1st level grid If the DoubleClick mouse event is used, then "PgWeb- Theme1 "page appears.

If the Tree object is in the 1st level grid, the 2nd line is marked and two when the left mouse button is pressed (i.e. the DoubleClick event of the mouse)), then a page called PgWebTest will appear. You can also create an .exe file by pressing a command button If you need to run, then the script is written as follows:

Shell.Execute("AutoPlay\\Docs\\MyProg.exe", "", "", SW_NORMAL, true);

Sometimes it's about creating different dialogs in

different options have to write a branching algorithm. For example, home launch that the InputBox will be displayed first, as requested for a password before the download If you want, then the following script for the "Preload" item of the homepage enough to write:

1. name = "";

2. while (name ~= "CANCEL") and (name == "") do

3.name=Dialog.Input("Attention", "Enter your name:");

4. if name == "" then

5. result=Dialog.Message*("Error!", "You did not enter information!",*MB_OK, MB_ICONEXCLAMATION, MB_DEFBUTTON1);

6. elseif name =="CANCEL" then

7.name=Dialog.Input("PersonalInformation", "*Here's the author's name sheriff is entered: ");*

8. end

9. Paragraph.SetText("Paragraph5", name);

10. end

When writing a script, the focus is on the object focused on the event.

Writing a script in AutoPlay Media Studio 7.0 is a bit more complicated, but in any repetitive situation to minimize the content of the script or can provide the ability to write global scripts for simplification. This means that the script is in the field of work, or in other words, in the project a global scenario that is valid for all relevant pages may be, or limited to, valid for only one page could be a scenario. Limited scenarios are another part of the project loses its validity when you go to the page.

V.Conclusion

At present, the educational process in Uzbekistan is in line with international requirements intelligent, able to think independently, intellectual

special attention is paid to the education of talented young people. It's yours in turn, the need to pay more attention to the educational process, the educational process Improving efficiency leads to a deeper understanding of the mysteries of science and technology. Today, the teaching of "programming languages" in educational institutions is the most popular is one of the current problems. This research to solve it developed a methodology for teaching programming languages. Including the following work done:

•The basic form and content of teaching Pascal programming language are shown;

• The basic form and content of teaching Delphi programming language are shown;

• The basic form and content of teaching C ++ programming language are shown;

• Develop recommendations based on Pascal, Delphi, C ++ programming languages came out;

• One e-textbook for teaching Pascal, Delphi, C ++ programming languages was created. Teaching programming technologies and their importance in the dissertation. We have provided information and recommendations on To explore the topic we have divided the dissertation into three chapters. The first chapter is about programming tools modern technologies, history of programming languages, solutions to problems and algorithmic language elements, algorithm concepts, and object-oriented algorithms. The second chapter is Pascal, Delphi, C ++ We've covered the capabilities of programming languages. In the third chapter Recommendations for teaching Pascal, Delphi, C ++ programming languages. In short, the programming mentioned in the dissertation programming languages using technology teaching recommendations would help teach.

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QR – Issue   **QR – Article**

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ASSESSMENT OF THE CLINICAL AND FUNCTIONAL STATUS OF THE ORAL CAVITY IN THE COURSE OF CHRONIC PERIODONTAL TISSUE PATHOLOGY IN DERMATOSES

Abstract: *The article describes the assessment of the clinical and functional status of the oral cavity in the course of chronic periodontal tissue pathology in dermatoses. Clinical examination was performed in 154 patients aged 25 to 60 years with various forms of dermatoses (including 98 patients with purulent form and cardicosteroid medications prescribed by a specialist) and 50 patients with periodontal tissue lesions without clinical signs of dermatoses (control group - CG), radiological, clinical-laboratory, clinical-functional and statistical examination methods were conducted for three years.*

Key words: *Dermatoses, chronic periodontitis, oral cavity, pathogenesis, carticosteroid drugs.*
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Introduction
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The pathogenesis of chronic recurrent periodontitis (PCRP) lies in the genesis of local tissue trophic disorders, disorders of organic and microcirculatory activity as a result of imbalances in the mental, hormonal, immunological and immune systems. As a result, periodic tissue hypoxia is observed, the activation of free radicals oxidation, superoxide dismutase attenuation and catalase, glutathione peroxidase, cytochromoxidase activity decreases, but the increase in sulfhydryl group increases protein consumption, among these clinical antioxidant drugs [5,8], a number of types of dermatoses; It was noted that periodontal tissue injury in patients with dermatitis, eczema, neurodermatitis,

urticaria depends on the age of the patient and the hygienic condition of the mouth, including the CPITN - index [8].

Another group of scientists developed a concept showing the association of stereotypical reactions of local and systemic character in the observation of PCRP pathology among patients with dermatoses, and that it is associated with the development and progression of endogenous intoxication; increase in the number of medium-molecular peptides and oligopeptides in the blood, proteolytic processes, LPO activation, AOT depletion, increased oxidative modification of proteins [4,5],

Other authors have noted that long-term use of glucocorticosteroids leads to mineral imbalance, decreased bone tissue remodeling and the development of osteoporosis [6,7,9], lack of a

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comprehensive approach to systemic treatment of periodontitis in patients with dermatoses, lack of clinical cooperation between dentists and dermatovenerologists [1,2] . Based on the results of the analysis of the literature, the scientific basis for the occurrence of periodontal disease among patients with dermatoses and their etiopathogenetic course confirms the need for research to date.

II. Literature review

The purpose of the study: the incidence of PCRP in dermatoses and the assessment of the clinical and functional condition of the oral cavity.

In the clinical base of the Department of "Dentistry, Pediatric Dentistry and Orthodontics" TIAMS and 154 patients with various forms of dermatoses aged 25 to 60 years (including 98 patients receiving vesicles and cardicosteroids by a specialist) and dermatoses clinical, radiological, clinical-laboratory, clinical-functional and statistical examination methods were conducted for three years in 50 patients (control group - CG) with periodontal tissue injuries only without clinical signs.

III. Analysis

Results of scientific research; in various forms of dermatitis (eczema, neurodermatitis, krapivnitsa, krasnyy ploskiy lysha, vesicles, etc.) the pathology of periodontal tissue is reflected in each other in the clinical picture. For example, only $14.8 + 1.1$ people aged 25-35 years were examined for periodontal tissue, $86.02 + 2.2\%$ had signs of tissue inflammation, of which $14.4 + 1.2\%$ were gums, $35.3 + 1.8$ % tartar, $30.6 + 1.8\%$ tooth-gum pockets 4-5 mm; $7.4 + 2.1\%$ 6 mm and deeper cases were reported. $22.6 + 1.1$ and $78.3 + 3.2\%$ of cases of intact teeth and pathological gums at the age of 36-45 years, and inflammation and congestion of the gums $30.2 + 2.0$ and $3.2 + 3.2\%$.

Among patients with dermatoses aged 25–35 and 36–45 years in CG, the average number of dental pockets did not exceed 2–2.5 mm, and the incidence of inflammation was 22.5% on average. In the main group, the analysis showed that the difference between the minimum and maximum significance was 2.2 to 3.7 compared to the control group, when there was an injury to the periodontal pocket segments from 3.4 to 4.5 for one examined patient.

46-60-year-old patients with dermatoses and periodontal pocket depth 4-5 mm and above 6 mm; an equal result was observed in the sequence $44.1 + 2.2$ and $12.5 + 1.2\%$. In this group, segmental injuries, periodontal disease and tartar in periodontal tissue were observed in $9.1 + 1.1$ and $35.6 + 1.5\%$. At the same age in CG, periodontal tissue inflammation and gingival pocket depth were reported in the order of $24.9 + 2.2$ and $5.7 + 0.9\%$, respectively, with gingivitis and tartar $14.2 + 1$, Decreases were observed between 1 and $31.2 + 1.5\%$.

The results of the study show that periodontal disease among people with skin and genital pathologies; gingivitis, gingival sinusitis, and calcification are associated with negative clinical signs in CG, i.e., those without dermatoses, as well as relatively curable treatment-and-prophylactic care.

A total of 98 patients with a vesicular appearance of dermatoses that was in the clinical stress phase and receiving corticosteroid therapy were screened. In patients, numerous erosions were noted in the unchanged mucosal layer of the oral cavity that merged with each other. The affected areas were reddish with a white-gray fibrous coating, often bluish in color.

Oral discomfort in 37 (36.6%) cases, while 12% of patients with the blister form of dermatoses complained of pain in the oral cavity; 50 (51.88%) reported pain during speech or eating, and 11 (13.44%) reported pain and refusal to eat due to pain. Of those examined, 62 (63.36%) complained of excessive salivation, and 36 (76.7%) complained of bad breath.

When analyzing the anatomical and topographical location of the elements of the lesion, they are most often in the mucous membrane of the cheek - 42 (46.56%); at the base of the tongue and at the base of the mouth - in 36 (35.13%) patients, and limited gum injury was recorded in 20 (19.65%) patients, among other topographic areas of the OCD. Injury elements were observed in 21 (20.92%) of the labia, outside the oral surface, and in 23 (21.54%) in the retromolar area.

Injury of gum tissue and alveolar tumors of the alveolar area was observed in 57.74% of patients, of which limited location was detected in 22.8% and 34.12% of patients, covering other areas of the alveolar region.

Periodontal tissue injury in the form of dermatoses, exactly periodontitis is observed in 96% of cases; severe periodontitis (SP) - $60.77 \pm 6.89\%$ ($5.0 \pm 3.45\%$ in CG), moderate periodontitis (MoP) - $18.44 \pm 3.5\%$ (17 in CG). $0 \pm 3.85\%$) and mild periodontitis (MiP) - $18.39 \pm 2.0\%$ ($37.5 \pm 7.65\%$ in CG).

The result was a direct correlation between the SP incidence rate, which is statistically significantly higher than CG, and its progressive increase with increasing bladder duration; that is, $44.72 \pm 2.06\%$ with a disease duration of up to 1 year; In 1-3 years - $64.0 \pm 3.8\%$ and for more than 3 years - $84.4 \pm 3.12\%$. The prevalence of MoP and MiP levels decreased, and their incidence was $23.81 \pm 7.84\%$, respectively, when the disease duration was less than 1 year - $25.37 \pm 3.62\%$; Results of 1-3 years - $11.0 \pm 4.01\%$ - $16.0 \pm 3.43\%$ and more than 3 years - 1.8 - $2.6 \pm 3.12\%$ were recorded.

Studies have not shown that the prevalence of periodontitis depends on the localization of the symptoms of the injury; in contrast, the SP level was

68.63 ± 9.92% in limited injury of the gums and alveolar tumor; in joint injuries - 62.45 ± 5.11% and limited - 49.0 ± 0.95%: the number of MoP was 8.50 ± 6.9%, respectively; 23.58 ± 9.55% and 19.0 ± 4.68%: MiP - 13.22 ± 6.6%; 9.9 ± 4.4% and 13.0 ± 4.68%, respectively.

The development of inflammatory-destructive lesions in the periodontium is led not by the location of the elements of injury, but by systemic autoimmune processes that determine the activity of aggression factors and weaken the body's compensatory capacity.

It should be noted that the prevalence of injury, the severity of periodontal injury, which corresponds to the periods of severe inflammatory-destructive disorders and recurrence of perforation, is the specificity of periodontal tissue injury.

IV.Discussion

Index assessment of periodontal hygienic condition was observed in the following table when observing the duration of the periodontal anatomical and topographic variants of signs of injury (Table 1).

Table 1. Indices of inflammation, destruction, hygiene and periodontal bleeding depending on the duration of dermatoses in the form of pustules

Group, duration of corticosteroid intake, year	PI, score	PMA,%	OHI-S, score	Bleeding, score
Control n=50	2,65±0,15	35,25±1,66	2,87±0,14	1,42±0,10
Patients with pertussis n = 98				
Up to 1 year n=26	5,28±0,22°	50,24±2,32°	3,62±0,15°	2,65±0,11°
1-3 year n=34	6,44±0,31°,Δ	66,31±3,11°	4,88±0,21°	3,00±0,14°
>3 year n=38	7,62±0,42°,Δ,X	78,45±3,62°,Δ,X	5,81±0,27°,Δ,X	9,52±0,17°,Δ,X
Total n=98	6,66±0,22°	67,65±23°	4,82±0,22°	3,08±0,11

Note: ° - P <0.05 - relative to control; D - P <0.01 - for results up to 1 year; CH - P <0.01 - for 1-3 years

The rate of periodontal destruction (PI index) in patients with pertussis was 154.2% (P <0.01) relative to CG; gingivitis index (PMA) - 91.91% (P <0.01); oral hygiene (OHI-S) - 67.9% (P <0.01) micelle bleeding index (Müllertsan index) - and 116.9% (P <0.01). It was found that the degree of inflammatory-destructive damage to the periodontium increases with increasing duration of perforation.

In patients with pericarditis, the PI index is 99.25% (P <0.01) when the disease duration is up to 1 year; 1-3 years 143.02% (P <0.01) and more than 3 years - 187.55% (P <0.01); The same dynamics was observed for the PMA index, which was 42.52% (P <0.01); 88.11% (P <0.01) and 122.55% (P <0.01); oral hygiene OSU-S index - 26.13% (P <0.01); 70.03% (P <0.01) and 102.44% (P <0.01) and the gum bleeding index was 86.62% (P <0.01); 111.27% (P <0.01) and 147.89% (P <0.01) of CG were observed.

Thus, in limited periodontal injury, the PI index is 165.66% of CG (P <0.01); 161.89% (P <0.01) in combined injuries and 146.04% (P <0.01) without alveolar gum injury; PMA index corresponding to - 90.77% (P <0.01); 86.21% (P <0.01) and 81.96% (P <0.01); For the OSU-S index - 69.69% (P <0.01); 70.38% (P <0.01) and 60.98 (P <0.01); gum bleeding

index - 119.42% (P <0.01); High results were observed for CG values of 114.79% (P <0.01) and 109.86% (P <0.01).

In addition to general factors (subsystemic pathology, corticosteroids and cytostatics intake), the following local factors play an important role in the genesis of periodontal injury in patients with peritoneal lesions: 11.11 ± 6.0% were observed in NG (P <0.05); gum damage due to restorations - 53.06 ± 7.12% (11.11 ± 6.0 in NG) (P <0.05); injuries of the gums with orthopedic structures - 42.29 ± 7.06% (NG-14.81 ± 6.9%) (P <0.05); Induction of OCD under the influence of tobacco was detected in 61.22 ± 6.96% (22.22 ± 8.06% in NG) (P <0.05).

The results of clinical trials of periodontal disease indicate that the joint pathology has a recurrent and progressive nature and requires the participation of dentists and dermatologists in their treatment.

An orthopantomogram of the lower third of the skull was analyzed to assess the condition of periodontal bone tissue. To do this, we performed orthopantomographic images densitometrically by direct X-ray densitometry.

Examination of orthopantomograms in patients with rheumatoid arthritis revealed a uniform change in the density of bone tissue on the horizontal surface, a decrease in the thickness and presence of porous substance, cortical plate on the vestibular and oral surfaces of the alveolar bone. Such changes in bone tissue indicate that resorption is not uniform and that osteoporosis is present.

In some patients, complete absence of bone on the vestibular surface of the tooth root and thinning of the compact plate were observed. In the absence of alveolar bone tissue on the vestibular surface, the thickness of the porous layer on the lingual side of the tongue is determined to be minimal. In patients with non-persistent periodontitis, the radiographic picture was consistent with that of moderate-severe periodontitis - alveolar marginal height decreased by 43.5 relative to root length, bone tissue thinning foci, bone columns, and trabecular cavities decreased accuracy.

Mineral density of mandibular bone tissue in the area of molar teeth in patients without molars was 16.16% (R <0.05); in patients with rheumatism - 29.04% (R <0.01); in the field of premolars decreased by 18.13% (R <0.05) and 27.52% (R <0.01), respectively; The same situation was observed in the upper jaw, where: in the molar sphere - 16.17% (R <0.05) and 29.64% (R <0.01), premolar - 15.2% (R <0.05). and 28.9% (R <0.01) (Table 2).

Table 2. Mineral density of alveolar tissue of the jaw in patients with periodontitis due to the presence of pustules (orthopantomograms% of light absorption)

Observation	Lower jaw		Upper jaw	
	Molar	Premolar	Molar	Premolar
Periodontitis				
There is no porcupine	73,62±3,21°	71,22±3,11°	73,82±2,81˙	71,33,3.05˙
There is no porcupine	62,312,66°	60,82±2,81°	61,92±2,65°	59,81±2,45°

Note: • - R <0.05 NG (for normal) control; ° - R <0,05) in relation to the indicators of non-peritoneal patients

An exacerbated decrease in alveolar bone mineral density in patients with rheumatoid arthritis suggests a pathogenetic link between mucosa, bone tissue, and systemic osteoporosis. These changes indicate the need for systemic and local osteotropic therapy.

V. Conclusion

Thus, periodontal inflammatory diseases are detected in 98% of cases in patients with perforation of dermatoses. Periodontal status in these patients, the status of OCD does not depend on the localization of the rash elements, the MoP level in their structure is $63.27 \pm 6.88\%$ in limited lesions of the gums and alveolar tumor; UODTP $22.44 \pm 5.45\%$ (R> 0.05); MiP occurs in $14.29 \pm 5.0\%$ (R <0.05).

Periodontitis in patients with periodontal disease is characterized by inflammatory-destructive processes in periodontal tissue, characterized by poor oral hygiene and high gingival bleeding, and increases the severity of periodontal injury with increasing duration of periodontal disease (R <0.05); in addition, porosity in the jawbone area was reported at high rates in patients with purulent disease.

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QR – Issue   QR – Article

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THE CONCEPT OF DEFINED TARGET TECHNOLOGIES AND THEIR ROLE IN THE EDUCATIONAL PROCESS

Abstract: given the rapid development of society, the expansion of development needs and opportunities, the acceleration of the flow of various information, the science of pedagogical technology needs to undertake to create a mechanism for the use of new forms, tools and methods of pedagogical forecasting.

Key words: society, information, science of pedagogical technology, tools, methods, pedagogical experimentation, extensive experience.

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Introduction

Research aimed at determining the place and level of education in different types of educational institutions today requires extensive use of the possibilities of pedagogical prognosis. Only then can the results of the educational process contribute to the development of science, industry, culture, economy and all spheres of society. Only theories based on pedagogical prognosis can be the basis for predicting the content, form and means of the stages and components of the continuous educational process, the level of impact of learning outcomes on society. This means that only in this way it is possible to restructure the educational process on the basis of new principles and new ideology, to carry out reforms in the field of education.

II.Literature review

Pedagogical technologies should be developed to diagnose the educational process and the developed theories, teaching aids, methodological bases, specific mechanisms, methods and tools for practical implementation on the basis of experiments. The diagnostic mechanism of the educational process is to determine the achievements and shortcomings of the process, the quality of educational outcomes, pedagogical theories applied to the educational process, the ability of modern technologies to develop educational practice or hinder the development of education should be directed.

Pedagogical experimentation is of special importance in determining the level of effectiveness of the results of research. Depending on the nature of the experiment, curricula, textbooks and lesson plans, methodical manuals, didactic developments should be created and presented to the experimental process. If the curriculum is being piloted, it is necessary to ensure that the observed learning process, i.e., textbooks or coursework, technical aids, visual aids, and teaching aids, is achieved.

The focus is not on what method or pedagogical technology the teacher uses, but on determining the effectiveness of the teaching materials provided within the curriculum. In particular, theories involved in the experimental process and the results obtained from experimental classes are required to be statistically processed.

III.Analysis

It is necessary to involve authoritative scientific and pedagogical teams and leading specialists in the examination of the experimental process and their results. *Extensive experience* - the process of testing and examination of the results should be carried out in accordance with the requirements of the regulations

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approved in advance by the scientific and pedagogical community. Today, in the development of our society, pedagogical prognosis is studying its clearly defined goals and objectives, object and subject, the logical basis of the problems, the laws of development, manifests itself as an important branch of pedagogical science, which has its own basic methodology.

Pedagogical prognosis is aimed at improving the quality of training based on equipping the system of continuing education, which serves the development of the state and society as a priority area of science, with educational models and technologies based on new pedagogical theories. Pedagogical prognosis selects educational technologies taking into account the age characteristics and developmental dynamics of the student's personality. Offers ways, forms, and tools to provide students with different levels of understanding and integrated knowledge within selected educational technologies. When theoretically substantiating a particular pedagogical technology, pedagogical prognosis should take into account the organization of the educational process aimed at ensuring the vital activity of the student and the teacher, the development of his free thinking, creativity.

Any pedagogical technology applied to the educational process, its components, regardless of the content of education, curriculum or textbook, through the activities of the teacher, contributes to the rapid development of free and creative activity of the student, is required to achieve. At the same time, pedagogical technologies, first of all, allow each student to freely communicate and exchange ideas with other students - pupils, lesson materials and the teacher (educator). Pedagogical technologies should be presented to the student as a form of pedagogical practice that introduces a set of laws, natural and social phenomena, human culture and ethics, the basics of a particular science. It is advisable to rely on theoretically based, well-tested and well-established laws in this area.

The essence of pedagogical technology is the formation and development of positive qualities and attributes in each person based on their needs, interests, abilities and capabilities. In this case, the content of education is the environment for the formation and development of the individual. Therefore, the content of education should embody humanistic ideas and norms aimed at humanity.

At the heart of the educational system in this pedagogical technology is the idea of humanity, aimed at the formation and development of a harmoniously developed human personality. The extent to which this idea is implemented is determined by the main outcome of the educational process, the assessment of the quality of the work of the teaching staff. An important factor in the development and democratization of pedagogical relations is the attitude to the individual, which determines the main outcome of the educational process.

The difference between human beings and other beings is that they set a goal and then move towards it. In the process of moving towards one's goal, one overcomes certain natural and artificial obstacles. He will take a number of measures to overcome these obstacles. A set of measures and measures used to overcome a particular obstacle in achieving a goal is called a method. One has to overcome several, sometimes dozens, of obstacles to reach one's goal. Appropriate methods are used in a particular system to overcome these obstacles. The system of methods used to achieve a goal is called a method. In the process of applying the methods in a particular style, the status of each action is subordinated to certain goal indicators. In addition, a person follows a number of laws as a principle in the process of achieving a goal.

Teaching style is a pedagogical activity that systematizes the interaction between teacher (educator) and student - pupils in order to impart and acquire knowledge. Teaching methods are an integral part of the learning process. It is impossible to carry out pedagogical activity without proper methods. Methods are divided into verbal, visual and practical, depending on the nature of the transmission and reception of knowledge. The following methods are used in mastering the content of education in accordance with the educational activities of students: explanatory - illustrative, reproductive, problem statement, private search or heuristic and semi-research methods.

Demonstrative teaching methods can be divided into two main groups: demonstration style and demonstration methods.

- Demonstration style involves showing students manuals, including maps, posters, board drawings and pictures, drawings, and more.

-The method of demonstration is usually associated with the demonstration of devices, instruments, experiments, various drugs. The peculiarity of the visual methods of teaching is that they are more or less in harmony with the style of verbal expression. The close connection between words and visuals is that the laws of objective existence need to be applied together in practice. So there are different forms of word-for-word communication.

Depending on the specifics of the educational task, the content of the topic, the nature of the available visual aids, the level of preparation of students, in a particular case they are rationally combined. Practical methods cover a wide range of different types of educational activities. In practice, the following methods are used: setting a task (goal), planning the method of its implementation, managing the process of implementation, analysis, identifying the causes of shortcomings, making adjustments to the educational process to achieve the goal. One specific

type of practical exercise is exercise interpretation. In doing so, the student actively observes the future behavior, speaks to him and comments on the future event. Movement commentary helps the student to understand his / her mistakes and make corrections to his / her actions.

Problem-solving techniques are used in problem-based learning. When using these methods, the teacher first creates a problem situation, asks questions, suggests problems and assignments, organizes a discussion aimed at solving the problem situation, confirms the correctness of the conclusion. The student first makes suggestions on how to solve the problem situation based on his / her knowledge and experience, and summarizes the previous knowledge, chooses the most reasonable option for solving the problem situation. This method not only increases the interest of students in knowledge, but also develops their thinking skills.

The educator usually aims to ensure that students understand and master the content of the material, acquire certain knowledge and learn to apply it in practice. But what does it mean to master, to understand, to apply? How does an educator know that he has achieved his goal? Only when there are clear means of knowing whether or not pedagogical goals have been achieved can an educator be convinced that his or her work is effective and that the methods he or she chooses are appropriate or, conversely, ineffective. This is exactly what the proponents of pedagogical technology have been thinking about in their study of teaching methods.

IV.Discussion

The educator receives an order from the community in general. Even the goals set out in the curriculum are limited to a few explanations. Here it is possible to create a specific stage of goal setting: from the general requirements of society - to the tasks of the education system, a particular educational institution, subject, its thematic sections and individual educational goals.

The traditional methods of goal setting by M.V. Clarin are:

1. Set a goal based on the syllabus.

2. Expression of the purpose through pedagogical activity.

3. Setting learning goals through the internal processes and laws of intellectual, emotional, personal development of the student.

4. Set learning goals through student activities.

In this regard, setting learning goals through the content of education, the activities of the teacher or the student does not allow to have a clear idea of the expected results in education. These results can only be inferred from the external manifestations of student performance. As the educator determines the learning outcome, he or she seeks to fully describe the observable external signs, that is, the process of

speaking and moving. Sometimes, the imaging process leads to the enumeration of external features, and this process can significantly simplify the result.

The method of goal setting in pedagogical technology has its own material nature. This is because learning objectives are defined by results that are expressed, clearly visible, and measured in student behavior. This means that while the main factor in the traditional learning process is the activity of the educator, in pedagogical technology the priority is given to the activity of the students in the educational process.

Use of specific concepts and their importance. Advanced creative educators, as a result of finding answers to the shortcomings of traditional educational technology, researching ways to carry out the intellectual work of the student, created unique teaching methods, which led to a new way of pedagogical thinking. It is on the basis of this research that pedagogical technologies based on pedagogical technology began to be created. The expected result can be achieved only if the system of applied pedagogical technologies is integrated into a system, and its targeted orientation ensures the integrity of the form and content of education.

The introduction of pedagogical technologies in the educational process is based on:

- Ensuring the priority of the student's personality involved in the educational process;

- Implementation of educational goals;

- Achieving targeted management of the educational process, as it is a manageable process;

- Unification of technology of means, methods and forms of providing educational content.

At present, the main principles of pedagogical technologies are:

- Regular analysis;

- Selection of the most necessary design tools;

- To determine the appropriateness of methods and techniques;

- Predict the outcome to be achieved, ie to achieve the goals;

- Ensuring the integrity of the educational process.

Pedagogical technology requires the introduction of a number of new elements into the educational process. These are:

1. Diagnosis.

2. Defining educational units (criteria).

3. Diagnostic analysis.

4. Correction.

5. Repayment (loss of sequence).

6. Get the expected result.

7. Rating.

Based on the above principles and elements, it would be expedient to implement the following in order to generalize and apply the work on the introduction of pedagogical technologies in the educational process, the creation of a system of

pedagogical technologies using pedagogical technologies in foreign and CIS countries:

1. The participants of the educational process should develop a plan of work between the teacher and the student, that is, a plan of study of the pedagogical department or chapter, which should reflect the student's activities.

2. Purposeful use of internal science or interdisciplinary communication. It is well known that each unit of study, small or large, is based on what has been studied before. This means that when introducing a student to a new chapter, it is necessary to rely on the existing knowledge, if the existing knowledge is not enough, to prepare for the intermediate stage, and only then to move on to the next stage. One of the key elements of such pedagogical technology is diagnostics, which is to determine the degree to which students are ready to learn new knowledge.

3. Defining the criteria of educational units. Units of learning consist of concepts, definitions, rules, laws, events and happenings that must be studied by the student, and the provision of a logical connection between them leads to the mastery of this chapter or section. The pedagogical chapter identifies the units of study that students need to study in the hours allotted for the department, and also determines the time allotted. Units of learning are the criteria that need to be mastered and are measured by the marginal value of the assessment of students' knowledge, that is, they are assessed only if the student knows these criteria. The educator at this time does not work with an average grade for the group, but works on the basis of precise measurements. It therefore makes it a necessary task. In developing the curriculum, the educator identifies the units of study that students need to know by department, chapter, and semester, and assigns tasks to students as a task before studying the department. Assignments are transferred to the control task in determining the rating of mastering.

4. Diagnostic analysis. The following diagnostic measures will be taken to identify gaps in knowledge, skills and competencies, fill them and move on to the next stage of mastering:
- Diagnosis of the level of mastery of students;
- prevention of departmental shortcomings;
- development of special tasks to fill the identified gaps;
- setting working hours with special tasks;
- final diagnostic analysis.

Diagnosis is the next stage of educational technology and is one of its key elements. The educational process is guaranteed by identifying the causes of learning shortcomings, determining the level of knowledge of each student, making adjustments to the course. In diagnostic analysis, control is performed through testing.

5. Replenishment (elimination of defects). The purpose of the revision is to correct deficiencies in the knowledge gained. Defective situation must be reported to seller.

6. Get the expected results. This element is the central idea of pedagogical technology. While pedagogical technology requires that the outcome of the learning process be guaranteed, the educator aims to implement the course of the process for the intended purpose and to plan with a clear outcome. During the process, analysis is made, corrections are made, refills are made, and a pre-planned result is obtained. So, pedagogical technology is the goal of the idea.

The world of pedagogy, having experienced the impact of scientific and technological progress, combining the achievements of psychology, cybernetics, systems theory, management theory and other sciences, has entered the stage of active renewal processes and is bearing fruit in the practice of effective human development.

Pedagogical technology methods were originally developed for the productive, i.e., reproductive level, of teaching that required the mastery of movement in a model situation. Reproductive education is a necessary part of any education; it is associated with the assimilation of human experience in a specific subject. It is only when learners have a certain "foundation" of knowledge and skills that they can move on to effective, productive and creative approaches to learning.

V. Conclusion

Today, virtual stands are successfully used in higher and secondary special education institutions. So what do we mean by a virtual stand? A virtual stand is a practical training stand or training workshop that helps students to strengthen their theoretical knowledge and develop the necessary skills in a particular area through computer programs and technologies.

Virtual stands allow each student to "order" their access parameters to the technique and control their knowledge. The time spent on laboratory work, understanding it properly, and so on, is reduced by computer efficiency. It is important to save huge financial resources, especially in the purchase of modern equipment and devices, their distribution in all educational institutions. A simple CD with modern information technology can hold dozens, sometimes hundreds, of laboratory work. Now it is not difficult to calculate how many times such a virtual laboratory stand will cost. It is also possible to provide educational institutions with them. It would be better if they were connected to the Internet. From this it can be seen that the more virtual stands are used, the more such expenses can be avoided.

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SUBSTANTIATION OF LYMPHOTROPIC THERAPY ON THE MODEL OF ULCER COLITIS IN EXPERIMENT

Abstract: *The purpose of the study - study the state of the lymphatic system of the mesentery of the large intestine in experimental ulcerative colitis to substantiate lymphotropic therapy. For the experiment, we used 10-12 month-old dogs (24pcs), in which experimental ulcerative colitis was reproduced by rectal administration of an acetic acid solution. To study the state of activity of the lymphatic system of the large intestine, we used a method for studying the resorption of Evans blue solution after intraperitoneal and submucosal administration of the large intestine.*

Key words: *lymphatic system, submucosal administration, intestine, morphological changes, generally accepted methods, experimental ulcerative colitis, modeling, lymphotropic therapy.*

Language: *English*

Introduction

The study of morphological changes in the large intestine during the modeling of ulcerative colitis was carried out using generally accepted methods.

It has been established that impaired lymphatic circulation in the large intestine with experimental ulcerative colitis contributes to complications of the intestine in the postoperative period, which can be reduced by the use of lymphotropic therapy in the complex treatment of ulcerative colitis in patients. Inflammatory bowel diseases, including ulcerative colitis (UC), are currently one of the urgent problems of gastroenterology, which are caused by the prevalence of severe complicated forms of the course, with high mortality and difficulty in diagnosing and monitoring the effectiveness of therapy [8; thirteen]. As you know, UC develops as a result of a pathological immune response to antigens of the intestinal microflora in the presence of a hereditary predisposition, has a chronic relapsing course [8; 14].

II. Literature review

Of great importance in the pathogenesis of UC is given to antigens of normal microflora, to which the tolerance of the immune system is lost, as well as opportunistic microorganisms that continuously stimulate the intestinal immune system, which underlies the triggering and maintenance of the autoimmune process [1; 3; 7; 9; eleven; 14; fifteen].

Despite the fact that many questions of the pathogenesis of nonspecific UC are still insufficiently studied, the theory that the intestinal flora triggers an aberrant intestinal immune response and subsequent inflammation in genetically predisposed people is described in more detail [10]. According to lymphatic theory, primary changes develop in the lymph nodes of the mesentery and lymphoid follicles of the intestinal wall, which leads to lymphatic edema of the submucosal layer, resulting in destruction and granulomatosis of the intestinal wall [2]. It is important to note that the peak incidence of UC is in the age group of 20 to 40 years, which is the most active socially [6; 12].

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III. Analysis

However, the morphological criteria of UC, reliable from the standpoint of evidence-based medicine, are still not sufficiently developed [4]. Unresolved issues make ulcerative colitis relevant in relation to its treatment.

In this regard, it is important to further study the pathogenesis of UC, as well as the development and preclinical testing of new approaches to diagnosis and treatment. This is possible under the conditions of experimental modeling of UC in animals [5]. However, the morphological criteria of UC, reliable from the standpoint of evidence-based medicine, are still not sufficiently developed [4]. Unresolved issues make ulcerative colitis relevant in relation to its treatment.

In this regard, it is important to further study the pathogenesis of UC, as well as the development and preclinical testing of new approaches to diagnosis and treatment. This is possible under the conditions of experimental modeling of UC in animals [5].

The main part of the work was the modeling of experimental ulcerative colitis. To conduct the experiments, we used 10-12 month old dogs (24 pieces) on which we conducted serial experiments. The animals were divided into 3 groups: 1) a control group (8 pieces) for studying the activity of the lymphatic system of the large intestine and its mesentery in normal; 2) a group of animals to create a model of ulcerative colitis, which consisted of two series: with rectal use of 4% (4 pieces) and 10% (4 pieces) of acetic acid solution; 3) a group of animals (8pcs) with the obtained model of ulcerative colitis in which the state of activity of the lymphatic system of the large intestine and its mesenteries was studied. The animals of the first - control group were used to study the normal state of the lymphatic system of the intestine and its mesentery. We used the experience of studying the resorption of Evans blue from the mesentery of the intestines of the animal. The experiments were carried out in the operating unit of the Central Scientific Research Laboratory of AGMI. Under general intravenous anesthesia, with a fractional injection of a 2% sodium thiopental solution at a rate of 5 mg / kg, observing the rules of asepsis and antiseptics, a mid-median laparotomy of 15 cm length was performed. Hemostasis. After revision of the abdominal cavity organs, a section of the large intestine and an additional part of the loop of the large intestine with the mesentery were removed from the wound, which were isolated from the wound using sterile tampons. In the mesentery of this part of the large intestine in three places: the root, the middle part, the marginal part of the intestine, and additionally, 0.1 ml of a 0.1% solution of blue dye were injected subzero into the wall of the intestine. The resorption time of the dye introduced at four points until their color completely disappeared was determined visually and recorded by a stopwatch. After the experiment, the intestine is set back into the abdominal cavity. The surgical wound is sutured in layers, tightly. Dogs after leaving the state of anesthesia were transferred to the vivarium.

The second group of animals was used to create a model of ulcerative colitis. The main requirements for the model were simplicity, the short period necessary for its creation and its low cost. And at the same time it should be as close as possible in clinical, morphological, immunological parameters and hematological picture to ulcerative colitis. When analyzing the literature, in our opinion, the most optimal option for modeling ulcerative colitis that meets the above requirements was a chemically induced model, a method of rectal administration of 4% and 10% acetic acid. In accordance with the methodology, after a cleansing enema, in experimental animals, 2-3 ml of 4% or 10% acetic acid was rectally, fractionally, introduced into the cavity of the large intestine. Dogs were monitored for 3 days. 5 days after the introduction of the acetic acid solution, we performed a repeated mid-median laparotomy, a resection of that part of the large intestine into the cavity of which acetic acid was introduced 5 days ago. After applying the anastomosis end to end, the surgical wound was sutured in layers, tightly. Experimental dogs, after recovering from anesthesia, were transferred to the vivarium.

Since a typical clinical and morphological picture of ulcerative colitis was not established in animals of the second group, we used the third group of animals, where we used a more concentrated solution of acetic acid to create the model. Why, after preparing the animal according to the above method, rectally, fractionally, we injected more concentrated acetic acid in an amount of 2-4 ml into the cavity of the large intestine and observed the condition of the animal for 3 days. Further, all operations and the study of the rate of hemodynamic dynamics using Evans blueness was carried out as described above.

IV. Discussion

In the study of the state of the lymphatic system of the large intestine and its mesentery is normal. The results of the experiment are shown in table № 1.

Table № 1. The resorption time of Evans blue from the mesentery of the intestines of animals of the control group (intact)

№ experiments	The pressure of Evans blue and the time of its resorption (min. Sec.)			
	The root of the mesentery	The middle part of the mesentery	The marginal part of the mesentery of the intestine	The wall of the intestine is the subserous part
1	3.22.	3. 52.	4.15.	4. 22.
2	3.29.	3. 54.	4.17.	4. 25.
3	3.24.	3. 55.	4.21.	4. 29.
4	3.31.	3 . 57.	4.18.	4 . 34.
5	3.33.	3. 52.	4.15.	4. 36.
6	3.38.	3. 59.	4.24.	4. 39.
7	3.37.	3. 53.	4.26.	4. 19.
8	3.31.	3. 50.	4.19.	4. 34.

From the data given in the table it can be seen that the rate of resorption of the Evans blue in time, at different points of the mesentery and the subserous layer of the large intestine, has differences.

When analyzing the results obtained from the second group of animals, it was shown that within 3 days after the administration of a rectally 4% solution of acetic acid, no clinical and pathological changes in the experimental animals (clinical signs of intoxication, diarrhea with an admixture of mucus and blood, weight loss of the animal) were not was noted. When after 5 days the mid-median laparotomy was performed, we did not reveal any clearly pathologically changed sections of the large intestine.

Histological examination of the resected section of the large intestine revealed no obvious pathological changes. The mucous membrane of the colon had a characteristic relief due to the presence of folds and crypts. The thickness of the mucous membrane throughout the colon is uneven. Crypts are located parallel to each other, often the bottom of them is somewhat widened, and reaches the muscle plate of the mucous membrane. Between the crypts are thin layers of loose unformed connective tissue (Fig. 1). Prismatic cells of highly cylindrical crypts are arranged in a row on the basement membrane, with a pronounced brush border. The nuclei of epithelial cells located usually in the lower third of the cell are round or oval. In the surface epithelium there are areas where epithelial cells containpyknotic kernels. Goblet cells are found mainly in the middle part of the crypts. On the drug, well-defined submucosal and muscle membranes of the colon are determined.
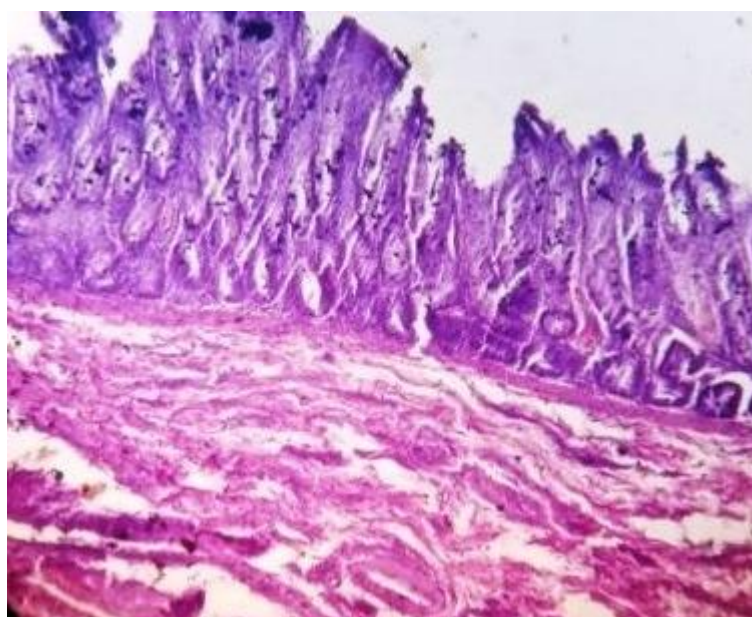

Fig. No. 1. The large intestine without signs of pathological Of changes. Coloring: hematoxylin -eosin. Ok. 10, about. 40.

In the second series of animals of the same group, where a 10% solution of acetic acid was injected to obtain a model of ulcerative colitis, insignificant clinical signs of intoxication, diarrhea with an admixture of mucus were observed starting from the third day after administration. On the 5th day

after the introduction of 10% acetic acid after laparotomy during revision of the abdominal cavity and in the projection of the large intestine, where acid was previously introduced rectally, the walls of the large intestine were slightly swollen, however, there were no obvious signs of inflammatory changes.

Histological examination of the wall of the resected section of the large intestine, microcopy showed that in some places minor point necrotic

sections of the mucous membrane were determined (Fig. 2). Where a mucosal defect was detected, the absence of damage to the basement membrane at the site, and slight local edema. That is, according to our data, in experimental dogs, we did not find pronounced clinical symptoms, as well as histological changes characteristic of ulcerative colitis, even in an experiment with the introduction of a 10% solution of acetic acid into the rectum.
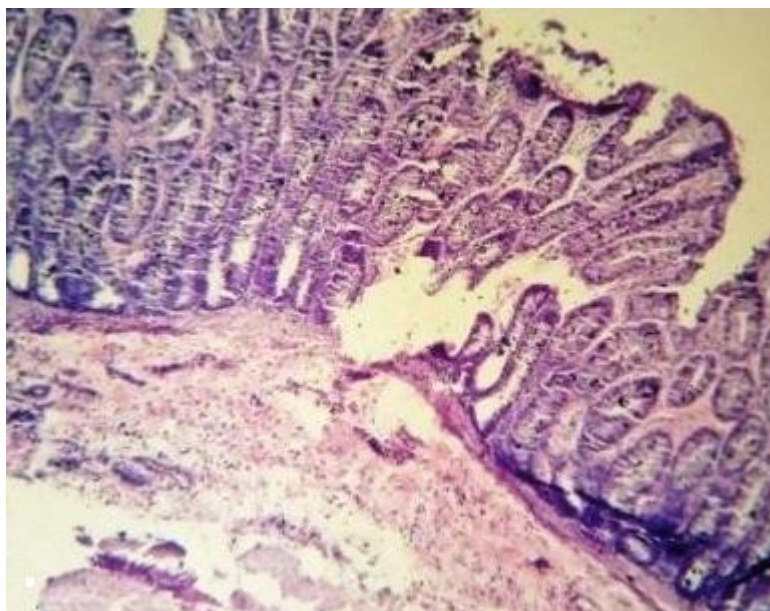
Fig. No. 2. Acute ulcer, slight necrosis of the thick mucous layer intestines. Coloring: hematoxylin -eosin. Ok. 10, about. 40.

In this regard, to create a model of ulcerative colitis, we used the third group of animals, where we used a more concentrated solution of acetic acid to create the model. Starting from the second day, the dog showed significantly more pronounced clinical signs: intoxication, diarrhea mixed with mucus and blood; experimental animals - stopped eating. On the 5th day after the introduction, an audit of the abdominal organs after laparotomy was performed in

the projection of the large intestine into the cavity of which acetic acid had previously been introduced rectally, the walls were significantly swollen, the vessels were hyperemic, and obvious signs of inflammation were visually determined.Here, before resection of the inflamed part of the large intestine, a study of the time of resorption of Evans blue was conducted. The results of the experiment are shown in table №. 2.

Table № 2. Resorption time of Evans blue from the mesentery of the animal's intestines after the creation of ulcerative colitis model

№ experiment	Points of introduction of Evans blue and the time of its resorption (min. Sec.)			
	Root of the mesentery	The middle part of the mesentery	The marginal part of the mesentery of the intestine	The wall of the intestine – subserous part.
1	6.39.	7. 21.	8.35.	8. 57.
2	6.44.	7. 19.	8.37.	8. 55.
3	6.49.	7. 43.	8.41.	8. 59.
4	6.35.	7. 37.	8.48.	9. 04.
5	6.51.	7. 39.	8.35.	8. 56.
6	6.38.	7. 29.	8.34.	8. 59.
7	6. 47.	7. 38.	8.46.	8. 59.
8	6.43.	7. 41.	8.39.	9. 05.

The table shows that after modeling ulcerative colitis in dogs, there is a pronounced slowdown in lymph circulation in the mesentery and intestines 2 times or more in relation to the control group of animals.

After examining the resorption time of Evans blue, a resection of the altered part of the large intestine was performed. Macroscopically, in an isolated area of the large intestine, a wet and shiny mucous membrane was detected, covered with clots of blood and mucus, with numerous point hemorrhages mainly in the mucous membrane. On which round or irregular shapes are noted, usually small, superficial ulcers of various sizes and shapes, sometimes merging ulcerations caused exposure of the entire colon wall. On the part of the mucous membrane, severe hyperemia was observed.

During histological examination of the wall of the resected area of the colon, under the microscope, significant necrotic areas were determined in the mucous membrane (Figs. 3 and 4). A large number of desquamated integumentary epithelial cells were determined. Deformation of crypts was detected, which are characterized by polymorphic changes, many of their sites became epithelial, lymphoid infiltration, accumulation of eosinophils, granulation tissue, or even slit-like ulcers were found in them. The muscle plate became edematous, muscle cell disintegration was observed, leukocyte infiltration occurred between myocytes, that is, all the histological signs of ulcerative colitis were evident.
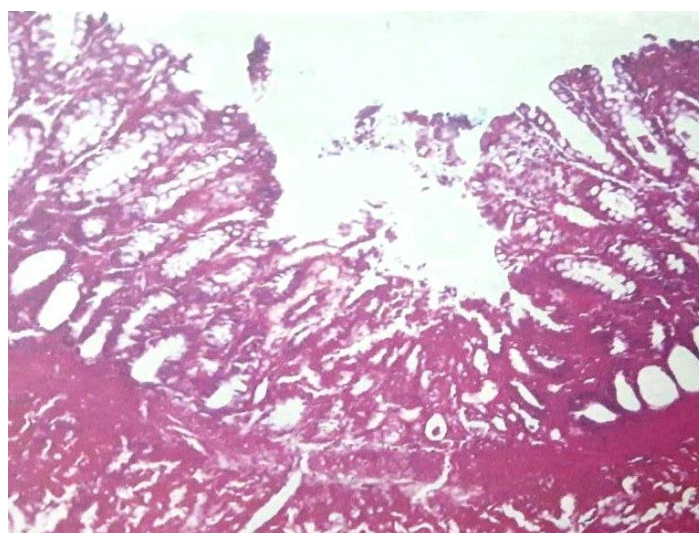

Fig. Number 3. Acute ulcer, necrotic process of the thick mucous layer intestines. Coloring: hematoxylin -eosin. Ok. 10, about. 40.
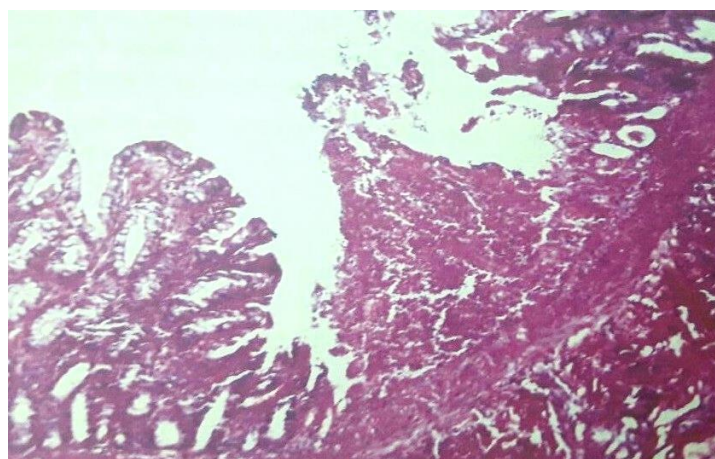

Fig. Number 4. Acute ulcer, necrotic process passes submucosal layer large intestine. Coloring: hematoxylin -eosin. Ok. 10, about. 40.

Analyzing the results of the study presented above, we can conclude that with the experimental model of ulcerative colitis in the mesentery of the intestine, a significant, two or more, slowdown of lymphocyte circulation is observed, relative to intact animals. This, in turn, can lead to stagnation in the circulatory system of the large intestine, then local violations of the rheological properties of the blood,

that is, contribute to the activation of inflammatory processes. Apparently, this is the cause of intestinal complications in the postoperative period with UCV.

Lymphotropic therapy improves the rheological properties of blood and lymph, enhances lymph outflow, normalizes microhemolymphocirculation, completely removes edematous fluid and toxic metabolites from tissues, and activates the neutralizing and immunological activity of the lymph nodes of the abdominal cavity. Thus, this method prevents unwanted complications that occur in the postoperative period from the intestine. In addition, it should be noted that with the lymphotropic administration of antibiotics, the occurrence of allergic reactions is not observed.

V. Conclusion

1. On the experimental model of ulcerative colitis, a violation of the processes of lymphatic circulation in the intestinal wall and its mesentery was established.

2. Impaired lymph circulation in the walls of the intestine and its mesentery contributes to the occurrence of complications from the intestine, especially in the postoperative period.

3. The use of lymphotropic therapy in the complex treatment of UC in patients helps eliminate impaired lymphatic circulation processes, due to which intestinal complications in the postoperative period are significantly reduced.

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THE ROLE OF THE LATIN LANGUAGE IN THE HISTORY OF WORLD STATEHOOD

Abstract: *Latin is a medical language. All terms related to this field are studied in this language. This language is widely taught in medical schools. The goal of this course is to teach future medical workers skills, such as independent reading in Latin and understanding medical texts with the help of a dictionary, learning information from local scientific literature and writing in their field, diagnosing and writing grammatically correct recipes.*

Key words: *terminology, medical terminology, international words, winged words, antique philosophical expressions.*

Language: *English*

Introduction

Roman literature was created on the western shores of Italian land in the language of one of the leading tribes of the time. Sources say that the spread of Latin was due to the expulsion of other languages from Roman territory, which dates from the 4th-3rd centuries BC. As a result of the prosperity of the Roman Empire and colonization of other nations, this language spread throughout North Africa, Spain, Gaul, Germany and the Danube. It is generally known that after the fall of the Roman Empire by the 5th century there were territorial differences in the language of the peoples of the empire. The written Latin language was preserved, it continued to develop lexically, and the basic vocabulary and grammatical structure of classical Latin stabilized. In all areas where literary Latin was widely used, it also served as the administrative, commercial, and written language.

It was the language of diplomacy, science and philosophy until the 18th and 19th centuries. In the 20th century, the language of the Catholic Church became the official language of the Vatican.

Literature review

Latin, now known as the dead language, is the mother tongue for a group of Romanian languages. Below we consider the global status of this language. First of all, Latin is a medical language. All terms related to this area are studied in Latin. This language is widely taught in medical schools. The purpose of this course is to teach future medical workers skills such as independent reading in Latin and understanding medical texts using a dictionary, learning information from local scientific literature and writing in their field, diagnosing and writing grammatically correct recipes.

In our speech, we often find words that come from Latin. We forget that they are often confused with our daily lives and absorb our language. Many of them have now become international words, for example, constitution, conference, revolution, party, empire, republic, reform, congress, army, liberal, certification, institute, university, faculty, audience, lecture, consultation, professor, doctor of sciences, associate professor, auditor, student, laboratory, subject, object.

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Analysis

There are some Latin expressions that do not even need to be translated. Examples include *Citius, Altius, Fortius, or Alma Mater*, who call the place of spiritual nutrition the Olympic slogan. In addition, the literary expressions of one of the great Roman poets Horace *Aureamediocritas* (Golden mean) or *Carpe diem* (Take the chance; Seize the moment ;), have their own alternatives in English, Russian and Uzbek; without translation they are used in Roman languages, i.e. in the original. Since they are so common in everyday life that they are not felt by the languages of these peoples.

Roman literature has a rich cultural heritage for the peoples of the world. One of them is proverbs. We know that using appropriate proverbs in our speech can increase the effectiveness and eloquence of our speech. A proverb is cited in a number of scientific sources as a compact, figurative and witty phrase, usually created by people on the basis of life experience. Each proverb is a sign of readiness, integrity and willingness to speak, and it is convincing and informative and is introduced into a ready-to-use language, enriching our speech fromgeneration to generation: *Qui pop laborat, pop manducet*(nom); *He who does not work, neither shall he eat*(eng); *Qui ne travaiue pas, ne mange ra* (fr); Кто не работает, тот не ест(rus).*Corvuscornooculos pop eruit (nom) \ Dog does not eat dog*; *Corbeauxcontrecorbeaux ne se craventjamais les ueih* (fr); The raven will not peck out the crow (rus).*In angustiis amici apparent \ A friend in need is a friend indeed; On connaitl'amidans le besoin* (fr); Друг познается в беде (rus).

In addition, meaningful expressions and winged words used by great thinkers occupy a worthy place in the languages of the peoples of the world. Winged words are phrases that are used in speech as a figurative illustrative quote. It is well known that winged words differ in their aphorism, universality, meaning, ease of use and specificity. These are expressions that convey deep thoughts in speech, which are expressive, figurative and briefly clarify the meaning of difficult situations and characters. It should be noted that winged words of Latin origin have their own alternatives not only in new languages, but also in different language families, where their semantic meaning is close to each other, and even in languages where race and religion are different and there they retain their winged charm and originality of meaning. For example*, Dulce et decorum estpro patria mori* (Horace); It is proud and exciting to breath and live for motherland; *II estdoux et beau mourir pour la patne* (fr); *Отрадно и почетно умереть за отечество*(rus.) *Saluspopuli suprema lex* (Cicero); *People's sake is the principle* (eng); *Que le salut du peupiesoitiasuprameloi* (^ p); *Блага народа да будет высшим законом*(rus). *Audacesfortunajuvat* (Maron); *Fortune favors the bgave; La fortune*

favorise les audacieux(fr); *Судьбапомогаетхрабрым* (rus).

As can be seen from the examples, Latin philosophical expressions have deep philosophical meanings, since they convey a sense of honor as feelings of the homeland, as well as great ideas, such as attention to a person. He polished many languages.

Some of the proverbs or phrases that we use today in speech also have a Latin origin. It should be noted that the expressions that we use below are essentially expressions, winged phrases taken from the works of prominent native speakers of the Latin language. It is safe to say that their meaning and expressive imagery were used as proverbs.

Omatrapulchrafiliapulchrior (Horace); *Good blood alwrays shows itself*; *Яблоко от яблони не далеко падает* (rus); *Guttacavatlapidem* (Ovvdiy); Little strokes fell great oaks; *Капля по капли и камень долбит* (rus); *Ira auror brevis est* (Horace); *Капля по капли и камень долбит*(rus); *Menssana in corpora sano*(juvenal); *An applle a day keeps the doctor away; Healthy spirit in a healthy body* (rus); *Potius sera, quam тinquam* (Titus Liv); *It's better late than never; Лучше поздно чем никогда* (rus); *Veritas odium parit* (Terence); Home truths are hard to swallow, the truths hurts; *Правда глаза колет* (rus); Est modus rp rebus (Plavt); Everytning is good in its season; *Все хорошо в меру* (rus); *Amor caecus (Plavt); Love is blind; Любовьслепа*(rus)*; Homo homini lupus est (Plavt); Man is wolf to Man; Человек человеку волк* (Rus)*; Amantiumirae amorisintegratiost* (Terence)*; Quarrel of lovers is renewing their love; Anger in love - renewal of love* (rus).

This means that we can see the Latin language, now known as the dead language, in works that have survived to this day. Thanks to these works, we see that Latin has developed and changed over the centuries. It is widely preserved in medieval historical monuments and documents, in the writings of Renaissance figures. We see that among the peoples conquered by the Romans (Italians, Portuguese, French, Spaniards, Romanians), Latin played an important role in the linguistic process, its historical progress and evolution. This effect is manifested mainly due to the use of a large number of Latin words in their dictionary.

Thus, various Latin terms, figurative expressions, proverbs and winged words really indicate the invaluable contribution of this language to the cultural, linguistic and spiritual progress of world civilization.

Classical Latin continues to be an important cultural phenomenon of the modern world. Without this seemingly "dead tongue" it is impossible to imagine many areas of human activity. Yes, it's a dead language, but its "death" was beautiful - it generated most of the European languages from its resources, becoming the basis for some (Italian, Spanish, French,

Portuguese, Romanian, Moldavian and some others) and endowed with hundreds, thousands of words and terms other languages. Even the languages of such different families as Russian or Uzbek did not escape this influence. If you carefully examine it, it turns out that the scope of Latin is very wide and differs in considerable diversity even today - in the age of total globalization and communication.

Discussion

Today, Latin as the official language of the Vatican is used by the modern Catholic Church. Vatican records are being maintained in Latin and messages from the popes are being compiled. According to Western theological tradition, Latin scholars still write dissertations and even hold debates. Knowledge of Latin is indispensable for the clergyman of the Catholic Church. And in most foreign European countries and still Latin takes one of the most honorable places in the program of humanitarian "classical" gymnasiums. It should also be noted that knowledge of the Latin language has always been and is considered the basis of European education, since in this language the peoples of Europe have created their own culture for more than two millennia. Knowing Latin, a person receives the key to the huge strata of the culture of antiquity, the Middle Ages and the Renaissance.

Today, Latin in medicine is traditionally used in anatomical, clinical and pharmaceutical terminology. Knowing it allows doctors from around the world to easily understand each other. A long tradition of using the Latin language in medicine serves as a unifying factor for physicians around the world and for the unification of medical education. Historically, most recently, most medical essays were written in Latin. If in England in the 16-17th centuries it was considered the norm to write his treatises and other philosophical works in Latin, since it was believed that these works would remain for centuries for posterity [8, 2015], then, for example, in Russia the great Russian surgeon wrote in Latin .I. Pirogov, and I.P. Pavlov wrote an expressive message to the youth "Adjuventutemepistola". Yes, and these days often continue to come out this kind of scientific work.

Latin plays a special role in modern medicine - anatomy and pharmacology. All organs and parts of the human body have either Latin names or Latinized names. The same applies to drug names; in this area, unification is especially important, since without it is impossible to navigate in the vast ocean of drugs. Recipes have long been written in Latin and according to certain rules, so a recipe written, for example, in America, should be easily understood in Uzbekistan.

In many fields of science, primarily in botany and zoology, terminology is known to be based on Latin or Latinized Greek words. Each animal or plant has a corresponding "standard" scientific name, which allows scientists from different countries to clearly and unequivocally denote certain wildlife phenomena that have completely different names in different languages of the world. Scientific terminology, therefore, refers to the field of international vocabulary, to a large extent, built on the basis of the Latin language and its forms. This vocabulary should be equally understood by educated people around the world. Of course, most of the medical or scientific terminology differs in its specificity, and therefore is known to few. But in international vocabulary there is the most general layer, which consists of the most common words, mainly of public or political significance, which are known and understandable to everyone, but not always understood by them. This includes such borrowings from the Latin language as humanism, republic, public, dictatorship, forum, university, international, association, university entrant, assistant, associate professor, internship, student, scholarship, seminar, professor, lecture, laboratory assistant and many others.

Of course, in fairness it should be pointed out that a considerable part of international vocabulary is borrowed from the Greek language and from the main modern languages. In the main modern languages, including Russian, internationalisms make up 10% of the vocabulary. Scientists have calculated that out of the 20,000 most common words of the English language, about 10,400 are of Latin origin, about 220 are Greek and only 5,400 are Anglo-Saxon. [9] It is clear that one of the most important tasks of international vocabulary is to contribute to the progress of cognition, on the one hand, and better understanding between people, on the other. This determines its undoubted merits. The Latin language uses concise and aphoristic formulations that reflect or summarize experience in various fields of activity.

The concept of "winged words" is attributed to Homer, and as a term of literary criticism it has been used since the 2nd half of the 19th century. The Latin language is very rich in such expressions due to its long and meaningful history. Winged expressions arise in different ways and relate to different areas of human experience. The main subject areas or areas of classification are: aphorisms of worldly wisdom (proverbs, sayings), expressions from the field of scientific knowledge (medicine, jurisprudence), from literary works, as well as statements by famous historical figures. All these types of winged expressions are fully adequately reflected in the history of the Latin language. Since expressions summarizing the everyday experience of the Romans reached us, as a rule, as part of literary works, and not in all cases it is possible to clearly separate folk art from a later literary form, which was given to it by a particular Latin figure or writer.

For example, statements such as QuodlicetJovi, pop licet bovi ("what is allowed to Jupiter, the bull is not allowed"), Finiscoronatopus ("end-to-end crown"), Degustibus pop estdisputandum ("do not

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argue about tastes") belong to this area. ,Festinalente ("hurry, take your time"), Menssanaincorporasano ("a healthy mind in a healthy body"), Manusmanumlavat ("wash your hand with your hand") and many others. Many expressions were borrowed by the Romans from the Greeks.

The political experience of the Romans was especially intense, so many winged expressions arose in this sphere of activity (in many cases also not without the influence of the Greeks). Such, for example, is the expression *Voxpopuli - voxdei ("The voice of the people is the voice of God")* or: *Sivispacem, parabellum ("If you want peace, prepare for war!"* Ascribed to the ancient Greek poet Hesiod. Winged expressions were also born in the field of medicine. These include, for example, the famous expression attributed to the Greek physician Hippocrates: *Ars longa, vita brevis est ("Life is short, art is eternal"), No linocere ("Do no harm"), Mediscuscurat (morbos), naturasanat(" A doctor treats (illnesses), nature heals. ") The jurisprudence includes the expressions: Audiatur et altera pars (" Let the other side be heard "), Testis unus testis nuilus (" One witness is not a witness ").*

Many famous expressions have come into use in Latin literature from situations associated with various historical figures. For example, the expression *Aleajactaest ("The Lot is cast")* Caesar uttered when crossing the border river Rubicon, and the expression *Veni, vidi, vici ("Came, saw, defeated")* is a laconic message from Caesar to the Senate after defeating King Farnak. The famous speaker Cato the Elder, according to legend, ended his every speech in the Senate with the words*: CeterumcenseoCarthaginemdelendamesse ("And besides, I believe that Carthage should be destroyed")*. Latin poetry owes many winged expressions to poets and writers of its era. In part, these expressions, as already indicated, were more a literary formulation of the wisdom of the world than a writer's own invention. These, for example, include the famous phrase of the comedian Terence *Huma nihil amealienumputo ("Nothing human is alien to me"), Oh tempora, omores! ("About times, about morals!")* From Cicero's speech against Catalina, phrase *Timeo Dana osetdonaferentes ("I'm afraid of Danians, (even) bringing gifts")* from Virgil's Aeneid, words of *Sineira et studio ("Without anger and addiction ")* From the*" Annals "of Tacitus*, etc. The functional role of winged expressions in speech is to enhance the expressiveness of the statement, they act as a certain kind of stylistic tool. From the foregoing, it is clear that the study of the Latin language, maintaining a high level of knowledge in this area is a very urgent task of modern education.

In preparing future specialists in the field of medicine, undoubtedly, the study of the Latin language is of great importance. Already in the first year in medical science, students come across special concepts in Latin. Therefore, it is necessary to attach special importance to its study not only as the language of one of the most ancient cultures, but also as the language necessary in the practical work of a medical specialist. Yes, and any educated person in the modern world must understand an infinite number of terms that are replete with advertising posters, booklets and leaflets. This is especially true for medical terms.

Time dictates its own conditions and in order to understand the numerous medical terms, you need to know Latin and Greek, as they are one of the fundamental disciplines that are of great importance in the training of specialists in the field of medicine and pharmacy. They have to be encountered in everyday work - when reading the names of diseases, anatomical and clinical terms, names of medicinal raw materials, botanical terms adopted in the International nomenclature of names of chemical compounds and. Of course, in the recipe.

A professionally speaking modern doctor uses more than 60% of words of Latin and Greek origin. And this is not surprising, because it is well known that the terminologies of various sciences, including relatively recently emerged, have been replenished and continue to be replenished by actively attracting the classical vocabulary - Latin and Greek - through direct or indirect borrowing of the vocabulary and word-formation tools of these two classic languages of the ancient world. We all at least once bought medicines or went to the doctor. Any medicines have the same Latin name, except for the main one. Every medical student knows the name of all organs and bones in Latin. The question rightly arises as to why Latin is still of such great importance.

Historically, until the Enlightenment, the Latin language was considered a manifestation of high culture. Throughout the vast empire, Latin was the official, state language. Latin was also the language of jurisprudence, diplomacy, the Catholic Church and literature. Over time, the Latin language began to be gradually replaced by the Greek language.

Currently, the study of the Latin language is of great importance in the training of a mid-level medical specialist, as it helps to consciously assimilate and understand the medical terms of Latin-Greek origin, with which he will meet and use in his practical activities.

Since ancient times, doctors have known such a Latin proverb *Inviaest in medicina via sine lingua Latina* - impassable in medicine the way without the Latin language. This statement is true in our time, indeed.

Medical terms - anatomical, clinical, pharmaceutical - these are mainly words or foundations of Latin Greek origin. Therefore, medical education is impossible without knowledge of the basics of this terminology.

Nowadays, the meaning of Latin is not lost. In the description and classification of Latin diseases there are no equal. Although this language is still considered dead today, it is still an integral part of the work of every physician. Some Latin aphorisms and sayings relate to issues of life and death, human health, and the behavior of a medical worker. Some of them are medical deontological (Greek *deon, deonios* - "position + *logos* -"teaching ") commandments, for example*: Solusaegroti suprema lexmedicorum-" The good of the patient is the highest law of doctors ";* *Primumnolinocere! - "First of all, do no harm!" (The first commandment of a medical worker.)*

In medicine, as in any other field, there are terms, concepts and designations that fill the language, and they cannot be deleted from this area. Knowledge of the Latin language is necessary to study the theoretical and practical foundations of pharmacological terminology. The general formulation is the main branch of pharmacology, and the composition of the medicine, names, dosage forms, methods of preparation and delivery are drawn up in Latin. Therefore, without knowledge of the basics of the grammar of the Latin language, it is impossible to successfully study pharmacology. Future medical workers, this knowledge is undoubtedly necessary for work: in drugstores, at ambulance stations, in the departments of the central hospital. Also, without knowledge of the Latin language, knowledge of the composition of medicines is impossible.

In order to penetrate into the essence of the fundamental nature of anatomy and physiology, a meaningful understanding of the Latin language will be required. Latin in obstetrics and gynecology is an integral part of education. The names of diseases, devices, instruments, research methods are mandatory foundations of knowledge of nursing staff, which consist mainly of Latin and Greek terminological elements, and how clear and assimilated knowledge will be for a student depends on knowledge of the Latin language.

Conclusion

All of the above confirms that the Latin language is the basis of the professional terminological and conceptual language of medical workers. And the level of training of a competent specialist depends on the degree of student immersion in the process of studying Latin.

In order to correctly understand and construct medical terms, you need to master the basics of medical terminology in Latin, and they should be laid in the first year through a practical study of grammar elements and the principles of word formation. The student's enthusiasm and his independent work expand the cognitive and educational moment of studying Latin and its interdisciplinary connections with other disciplines of the educational cycle.

Learning the Latin language helps students to obtain conscious adoption and competent use of the professional language of the future specialist.

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QR – Issue

QR – Article

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"ALISHER NAVOI" – AS A SAMPLE OF POETIC DRAMA

Abstract: *The article explores the peculiarities of poetic drama in the case of Uygur and Izzat Sultan's "Alisher Navai" drama. According to the content, this book reflects one of the most difficult periods in the history of Khurasan - the reign of Hussein Baykara. In the book, Alisher Navai is portrayed as a progressive man of his time, a great statesman, a patriotic person, who fights justice, fights for unity of people and country, works for justice in the country. The poetic drama uses poems and ghazals of the great Navai and folk tales. The article discusses the important aspects of poetry drama, the structure of the work, as an example of this drama analysis.*

Key words: *Poetic drama, genre, philosophical depth, conflict, space and time, dialogue and monologue, chronotope, ghazals, rubais, proverbs.*

Language: *English*

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Introduction

It is well known that in historical dramas, the issues of dramatic situation and conflict have always been one of the most pressing issues. Because it is very difficult to fully capture the events that take place in historical works. In historical works, our playwrights are required to be able to generalize the whole image of history and raise it to the level of art. The peculiarity of works of the dramatic type is that, unlike the prose writer and the poet, he communicates directly with students and the audience through his protagonists. The playwright demonstrates the activities of the protagonists, expresses their morals, reveals their spiritual world, expresses his thoughts about life, expresses his attitude to important, topical issues of the time. This situation greatly increases the importance of the protagonist in the drama, and the importance of the protagonist's actions becomes clear. In this sense, historical dramas must be able to serve as a solid bridge between the past and the future.

Literature review

In the 20's of the last century, the genre of poetic drama began to become an artistic reality. Fitrat's drama "Satan's Rebellion Against God" can be considered as the first work on this path. Thus,

Oybek's "Mahmud Torobi", Hamid Olimjon's "Muqanna", M. Shaykhzoda's "JaloliddinManguberdi", Uygun and Izzat Sultan's "AlisherNavoi" dramas saw the world in our literature. It should be noted that this process became more active during the years of independence. Abdulla Aripov's "Sahibqiron", UsmonKochkor's "Imam Bukhari", IqbolMirzo's "Samarkand sayqali" can be considered as bold steps in the genre of poetic drama. It should be noted that they reflect the most important issues of history and time.

Analysis

Poetic drama of drama as a syncretic genre is known to have gone through several centuries of development in world literature. An important feature of this genre is determined by the fact that it is written in poetic form at the heart of reality. Among the above-mentioned examples of the genre, the drama "Alisher Navoi" by Uygun and Izzat Sultan stands out. The creation of this drama was an artistic phenomenon for its time in literature. The burning lines in it still live on today. In this regard, literary scholars I.Sultan, S.Mamajonov, theater critic T.Tursunov commented on this work and noted a number of qualities. According to the content, the play depicts one of the

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most responsible and complex periods in the history of Khorasan - the reign of Hussein Boykaro. The drama consists of five scenes, ten scenes.Izzat Sultan, together with the playwright Uygun, was able to revive the essence of this historical event on the example of the actions and destinies of concrete images and draw the necessary conclusions for the time. Of particular importance in the drama is the creation of vivid images of historical figures and the artistic expression of historical reality, the predominance of the mood of striving to elevate the human factor, philosophical depth and depth of conflict.In addition, the work is created in a combination of poetry and prose. This aspect brought it closer in form to folk epics. While the prose part of the work deals with historical events, the lyrical part of the work deals with historical events. At the same time, I.Sultan and Uygun Navoi included the poet's lines in the text of the work in order to reveal his spiritual world. This served to enrich the structure of the work with content.

The drama begins with a conversation between Navoi and Guli. The dialogue and monologues between them reveal the world of the hearts of those who have pure, sincere love. At the same time, the qualities of the great Navoi, who lived with the pain and anxiety of the people and fought for the prosperity of the country, were glorified. This is clearly seen in Guli's words:

Who is human, who is human
The grief of the people is my son-in-law [1, 79].

The playwrights tried to speak each character in an individual language depending on their character, behavior, and position in society. From the thoughts and actions of Navoi, we understand that the wise, great poet of his time was a progressive man. Hussein Boykaro's interpretation is one-sided, based on the policies of the time.In this sense, he is portrayed in the play as a life-loving king who does not have an independent mind, who does everything in a hurry, who acts on the predictions of the astrologer, not his own mind. The reason for this is that the drama shows that H. Boykaro was influenced by fraudsters, hypocrites and flatterers like Majididin.

The love story of Navoi and Guli is lyrically expressed in the play. In this respect, one scene in the work is noteworthy. In other words, it is possible to feel this situation through Navoi's poems dedicated to his beloved son in the spring:

E, nasimisubh, tell my dilorom about my condition!
Tell my Zulfisunbul, her face is a flower, my cypress is a gulandom!
Komtalxu, boda zahru, ashk gulgun bolg'onin ... [1, 77]

Monologues have a special place in the work. In particular, Navoi's monologue is significant in this regard. Irrigated with deep sorrow and pain, these lines reflect the great poet's feelings of separation and pure love after Gulin's death:

Put it on!
Gazelle! ..Oh! .. Again the tires are good,
He reminded me again of the forbidden haram ...
I will not forget you, I am alive,
They will keep you alive.
You will inspire my heart,
May you live forever with my poem.
Senga is more than a priceless statue.
Sometimes Shirin, Sometimes you're Layla,
You live always in my epics
Long live my friends… Им [1, 140]

From the above lines it is clear that Navoi's burning love for Guli is a dream come true. The invention "Flower without a Treasure" is applied to Guli, through which the image of devotion, a heart full of fidelity - a true lover shines.

Prose does not play a large part in drama. In this part, the work is carefully crafted, from the words of the participants to the scenes that mark their actions.

The past, the present and the future live in the events that took place. The events of the past can be seen in the form of a story, a memory, a dream of the future, a prophecy (Gulining's dream). The work uses stories, Navoi's ghazals and rubais, and folk proverbs, which serve to enrich the artistic structure of the work.

The authors focus on the image of the great poet of the XV century Navoi. In creating the image of Navoi, attention was paid to historical evidence and truths, their vital and real content. The reality of the period described in it is revealed in a wide range, with all its complexity. In the image of Alisher Navoi, the image of a progressive man of his time, a great statesman, a patriot, who knew justice as his motto, fought for the unity of the people and the country, for justice, and carried out creative work in the country.

Discussion

It is known that Navoi devoted his energy and will to the happiness of the people, fought against oppression and misfortune in the country. Navoi seeks to end the bitter quarrel between King Hussein Boykaro and his sons, cleanses the palace of sedition and gossip, and fights against the black forces Majididin and his supporters. Navoi believes that "someday the sun of justice will shine." He hopes that "happiness and truth must be celebrated in the world." That is why he said:

The inevitable fate is ours!
Let the light of justice shine on the world! [1, 128]

The drama tells the story of Navoi's mobilization to pacify the country and expel Yodgar Muhammad from the capital. Therefore, Navoi said to Hussein Boykaro: "I ask the authority to promise in the presence of the people that the emperor will devote all his energy to the development of the country." Then Hussein Boykaro promised: "I promise to spend as much as I need in my treasury, as much as I have money, for the prosperity of the country." However, he backed down due to the cunning of Minister Majiddin.

Navoi divides the king into two, saying that "there is evil and there is good." The work refers to the Navoi bytes from time to time. Therefore:

The world trembled king erur dragon, That is, when the grass is furious. To be resurrected in his name, Salary circle dragon coma. [1, 103]

"If a country is a garden, the king is a gardener. The garden will be ruined without a gardener. " The idea of a just king, the people's trust in AlisherNavoi more than Hussein Boykaro is also vividly expressed in the work: Navoi: Dear citizen! I gave an order from the emperor. The khiraj, which was unjustly imposed by the beys of Herat without our advice, was abolished. People! I guarantee the truth of this order.

Jaloliddin: If the poet Navoi is a guarantor, we must believe! Voices: Long live the poet Navoi who took care of us! Amen! We believe in the sincere dreams of the poet Navoi. [1, 98] The image of Guli is included in the work in order to express Navoi's heartaches, expressions of love, and bring the spirit of lyricism to the work. The images of Hussein Boykaro, Majididdin, historical figures, as well as the creative and statesman aspects of the great Navoi are revealed.

Hussein Boykaro is seen as a ruthless king who did not have an independent mind, who indulged in pleasures and entrusted the affairs of state to the hands of the accused like Majdiddin. At the same time, the modern nature of the work is obvious. Because the work was written in the 40s of the last century, when the attitude to kings was one-sided. In this regard, Hussein Boykaro was painted more black. It is known from history that after the death of MirzoUlugbek the cultural center moved to Khuroson, including his capital Herat.

The role of the ruler of Khorasan Sultan Hussein (Boykaro) (1469-1506) and, in particular, the great poet and thinker, the sultan of the Ghazal king Mir AlisherNavoi in the formation of the cultural and scientific center of Herat was incomparable. Although Hussein Boykaro's 40-year rule was not without its ups and downs, economic and cultural life in the country remained high.The role of the prudent and wise ruler of his time, Sultan Hussein, in the prosperity and prosperity of the country, the normalization of economic life, the rise of science and culture was enormous. Sultan Husayn was a supporter of the Timurids in their possessions in the Khurasan region, a supporter of patronage and arbitrariness, a great emphasis on architecture and beautification, a benefactor of science and culture, and a patron of patronage.

He wrote ghazals under the pseudonym "Husseini". To this day, his poetic Devon and prose treatise Risola have survived. An enlightened ruler, Sultan Husayn (Bayqara) became a patron of science, literature and culture throughout Khorasan. [2, 359] . According to the authors, Hussein Boykaro is on a "terrible path." The poets describe the reasons for Hussein Boykaro's decision as follows. HusaynBayqara said to Majdiddin in one place:

"I wish other emirs knew the language of the Ava like Alisher?" If only those who gossip knew their own faults! You always had a yard, you had a yard about rent, you made my head spin ... Here is the result! "[1, 96] These lines express the historical events as if the king did not listen to Navoi's noble advice, stopped the beautification work he had begun, and, according to Majdiddin, inflicted heavy losses on the great poet.

Conclusion

Even when approaching the work in the context of today's literary criticism, it is obvious that its virtues, in particular, I. Sultan and Uygun, in their time embodied the artistic image of the great Navoi on the basis of historical truth. During the period of independence, the interest in creating the image of a great thinker increased. Therefore, ChoriAvaz's "King without a Throne", Abdullah Azam's "Dugohi Husseini", Sh. Rizaev's "Iskandar" and Iqbol Mirzo's "Samarkand Saikal" are proof of our opinion. It should be noted that for these dramas Uygun and Izzat Sultan's "Alisher Navoi" can serve as a bridge.

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QR – Issue   QR – Article

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PERSONAL CHARACTERISTICS OF BUSINESS WOMEN

Abstract: This article is an empirical study of the personality traits of women entrepreneurs, including the study of women's personality in gender and psychological research, as well as entrepreneurship, emotional stability, leadership, social maturity, social resilience, confidence, independence, personality traits such as self - control, agitation, and tension.

Key words: gender research, entrepreneurial personality, personality traits, initiative, emotional stability, leadership aspiration, social maturity, social resilience, confidence, self-confidence, independence, self-control, mobility and tension.

Language: English

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Introduction

There is a living being that is made up of two sexes. Humanity is no exception. These two parts of humanity, made up of men and women, differ not only in their physical structure but also in their mental structure. This mental difference is determined by the role of women and men in society, as well as their physical structure, social status, role and biological functions.

Women, like men, have all the spiritual qualities inherent in men. But they possess these qualities to varying degrees, and the trait which is most pronounced in one sex may be weaker in the other sex. This implies the characteristics that are common to most members of the opposite sex.

In the world community, the issue of equal legal, economic and political rights of women and men, as well as their participation in public administration is considered a key issue. At the same time, it should be acknowledged that the role and place of women in social, economic, political and cultural reforms in our country is growing. This trend in women's activities is leading to a wide range of gender and psychological research.

II.Literature review

II. STUDY OF WOMEN'S PERSONAL PROBLEMS IN GENDER AND PSYCHOLOGICAL RESEARCH

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Many researchers who have studied women's psychology point out that they are more emotional than men, i.e., richer in emotions. Women's emotions are strong and their manifestations are also faster, brighter and stronger than men's. That is why they can quickly understand the mood of others and imagine it better.

Globally, it has been 200 years since women were emancipated (equal). In our case, it started in the 30s of the XX century. During these years, the role of women in social life has changed. This has led to significant changes in women's psychology as well.

As the issue of gender differences began to receive more attention in the twentieth century, a new concept of "Gender" entered the world of science [1; 16]. Before clarifying this concept, the concept of gender should be considered. Gender refers to biological indicators that represent differences between anatomical and physiological characteristics between women and men. However, the differences between men and women differ not only in biological socio-psychological characteristics, but also in social status and role, form of activity, behavior and a number of other psychological characteristics.

The concept of gender began to be used to clarify biological differences between men and women, and to define their social and cultural characteristics and behaviors. The introduction of the term gender has defined the boundaries of the biological and social gender concepts of gender. The term gender refers to the term social structure-social gender built on physiological reality [6].

III.Analysis

An anthropological study of the social structure of gender has focused on the study of the status of parents in society according to the position of parent, husband, wife[20]. However, a psychological analysis of the gender problem shows that it is culturally related as well as biological and social.

In everyday life, the concepts of "gender" or gender are used as a synonym with "husband" or "woman" related to the concept of gender. "Husband" and "woman" have their own terms "feminist" (woman) and "masculine" (husband) in expressing cultural content. The use of new terms, in addition to the opposite biological traits in men and women, requires attention to reveal the internal mechanisms that form in different cultural environments from a gender perspective.

It should be noted that two approaches to the gender problem, namely biological and social determinisms, provide relative clarity. Gender is a social expectation of behavior that is specific to both men and women. Gender refers to the socially shaped characteristics of men and women, not the physical differences between men and women.

If gender refers to differences in physical structure between men and women, then the concept of "gender" refers to their psychological, socio-cultural characteristics. Gender and gender limitation are fundamental because many differences between women and men are due to non-biological causes of nature.

Other factors influencing socialization include ethnicity and cultural affiliation. For example, an analysis of research in the United States shows that a small number of women (black people in the United States) have a partially equal position with men in this group and with women of most races (i.e., whites). Or it may be that women of a particular culture (hunters, ranchers) have more common characteristics than men of this culture than women of industrial society [6].

In social psychology, it is noted to show the following aspects in order to clarify the individual:
• affiliation with a specific group;
• assimilation of social influences (according to the system of activities);
• how to express its social essence in a specific group [2; 271].

In the social order, the social bleaching of 'man' and 'woman' is taken into account. If such an established order is violated, it will lead to a change in the generally accepted norms in the gender issue. Non-gender (atypical) behavior - the owner of the character behaves in violation of socially accepted norms, and as a result he becomes a stranger to society.

There is also a certain hierarchy of dominance in some cases of 'male' and 'female' relations in social norms. According to this hierarchy, the importance of duty, function, and values is observed to be much higher in men than in women. Inequality in issues related to the status of women and men in the social environment leads to gender asymmetry in different areas [11].

Gender studies covering the issue of women have covered a wide range of countries around the world [8], [9], [10], [12]. In particular, H. Rose analyzes the research on women's issues in the UK, clarifies such concepts as "gender research", "women's research", "feminist research" and proposes to call them general "gender research" [10; 52 - 59].

While describing the development of gender research in the United States, M.K. Chamberlain noted that in the United States in the 1960s, this issue was considered part of the education and research program, and one of the first courses on women's issues was published in 1912. The effect of the changes "course has started.

According to the researcher, psychology, anthropology and interdisciplinary curricula have been developed to cover women's issues ("SIGN: Journal of Women in Culture and Society", "Journal of Women's History", "Psychology of Women Quarterly", "Women's Studies Quarterly", "Women's Studies"). Review of Books clarifies issues related to women's research in Australia, but also acknowledges the importance of the role of women in society,

emphasizing that mechanical involvement in the problem of women alone is not enough. The employment of women also clarifies not only the characteristics of labor, but also the phenomenon that determines their share in the state economy despite their low wages. Because women work as housewives in addition to work, this work is often overlooked [12; 39-42].

According to S. Megeri, gender research on the role of women in the economic system in Southeast Asia is relatively weak [9; 43].Thus, the study of the problem of women has become widespread within the Australian education system. Therefore, today women have been able to develop their social status [9; 45-46].

K. Lazaris, like the above researchers, devoted his research to gender studies in the Mediterranean region, arguing that the study of the problem of women and its global attention led to the historical direction of women's movement in their favor. As a result, gender-based discrimination against women has provided an opportunity to define the prospects for creating effective mechanisms to enhance the political, economic, social, cultural and educational status of women on earth. But today, women's gender research in many countries is at the crossroads of the lower Mediterranean region, connecting West and East, North and South. It has three major world religions, namely Christianity, Judaism and Islam, and covers virtually all levels of regional development.

Peculiarities of women's living in the Mediterranean region, abnormal market conditions, overwork, poverty are observed. Therefore, gender studies in the region were not initially transparent [8; 47 - 52].

The research listed above on gender relations is evidenced by more sociological research. There are also philosophical, historical approaches to the problem of women, which have a unique field of analysis during the ancient world, the Middle Ages, the Renaissance, the New Age. This problem is also found in the research of Russian and European philosophers and economists (Plato, Aristotle, Thomas More, Campanella, A. Schopenhauer, N. Chernyshevsky, A. Bebel, Jean-Jacques Rousseau, I. Kant, Voltaire, Diderot, Fure, Saint-Simon , Owen, O. Weininger).

Plato expresses his views on the awning rights of the sexes, as well as on the family and marriage, in such works as The Feast, The State, The Laws, and Timey. Plato emphasizes the need to free women from household chores and considers their mental activity to be equal to that of men ("women could also be philosophers and warriors") [1].

Thoughts in this context laid the foundation for the public recognition of the problems facing women in the late eighteenth century. In this century, women who did not have equal rights with men in society took the side of many people [13; 9 - 23].

In 1789, the secretary of the French Academy of Sciences, the philosopher and enlightener J.A. Condorcet, published an article on "Women's Civil Rights." There he opposes "various superstitions" because women and men are not equal. The equality of men with women was also put forward by French enlighteners such as Jean-Jacques Rousseau, Voltaire, Diderot.

The development of production capacity and power has attracted women to production in society. This has attracted the attention of many progressive thinkers in society since the second half of the nineteenth century and has not left them without involvement in the issue of women.

The escalation of the issue of women has led to a deeper study of their nature, socio-economic, political-legal, cultural, ethnic, psychological aspects. Relying on a wide range, the researchers analyzed the genesis and functions, the nature of the dialectic of the relationship between women and society, and created a source for comprehensive thinking about it.

Historically, national psychology has also focused on the problem of women. When we study the psychological characteristics of Uzbek women, we first look at the past. We will try to study in detail the attitudes towards women in the past and their psychological characteristics, feelings, customs and traditions.

True human virtues, such as perseverance, courage, forgiveness, hospitality, high generosity, love and devotion to love, are sacred qualities inherited from our ancestors. That is why in the epics of the peoples of Central Asia, including the Uzbek people, which reflect the tribal and tribal way of life, women's courage, bravery, humility, devotion to love, friendship and brotherhood, the struggle for peace, human dignity, honest and pure life, the feelings of love in the family are glorified. We see that these great ideas are perfectly interpreted in the epics of the series "Tomaris", "Alpomish" [18; 33].

It is noteworthy that in our ancient epics, women are depicted on an equal footing with men. They were also able to show equal courage with men in all areas, even in military operations. For example, the legend of "Tomaris" reflects the characteristics of women: love for the motherland and freedom.

From time immemorial in the East, a woman, her creative activity has been glorified. The fate of the homeland is equated with the fate of his women. A country where a woman is abused is in crisis, and a state that honors women is considered powerful. They believed that a society would develop and a healthy generation would be brought up only if a woman was educated, enterprising and spiritually mature.

Today, issues related to men and women, who are considered as a gender issue, have been resolved with a certain clarity in the Islamic world. Islam also pays special attention to issues such as women, their psyche and their place in society.

It is the task of experts in the field to study in depth how the holy books, the Qur'an and the Hadith, treat women. The Prophet Muhammad (peace and blessings of Allah be upon him) praised the role of women in human development and society, saying, "The best of you are those who are kind to their wives (i.e. family members). He said: "Only the wicked humiliate the women." [3: 88]

First of all, a woman should be proud of her femininity. It is not in vain that Allah created her as a woman. Allah says in Surat al-A'raf: "He it is Who created you from a single soul and created from it its mate that he might find rest in it ...", is a symbol of peace, tranquility, tenderness, love. This should be well understood by every woman [7; 114-115].

In Islam, women are treated with kindness, purity, patience, loyalty, obedience (to their parents and husbands), respect for adults, respect for the little ones, gentleness, turning their husbands away from evil, encouraging them to do good deeds, educating their children and being a wise mother, commanded to possess great human qualities such as being.

The views of Eastern thinkers on the role of women in society and the family shed light on some aspects inherent in ethnic psychology. Our great ancestor A.Navoi was not only the sultan of poetic property, but also a mature scholar of the school of etiquette and education of the peoples of the East, in particular, the Uzbek people, a just and enterprising statesman, a master of national culture. Through the images of Shirin and Layli in her works "Farhod va Shirin", "Layli va Majnun", she showed the ethnic characteristics, feelings and moral qualities of women. In these works, she glorified such qualities as devotion to the love of women, diligence, patriotism, sweetness, freedom, beauty, elegance.

One of the great thinkers, A. Beruni, also said that women should be "the core of purity and modesty." In addition to health, such qualities as painting, nail removal and polishing also ensure the beauty and purity of a person"[4, 23].

Consequently, each society and nation has its own characteristics and differs to some extent from other social systems and fraternal peoples with its traditions and customs, customs and morals, way of life and spiritual values, interpersonal relationships and rhythm of communication.

The existence of specific approaches to the study of problems related to the psychology of the individual at different stages of socio-historical development shows the complexity and relevance of this issue.

In the current situation, the psychological characteristics of women, their role in the family and society is one of the most pressing issues. For this reason, our local scientists also conducted research on the socio-psychological, ethnopsychological characteristics of Uzbek women (Y.N.Yakubov, G.B.Shoumarov, N.A. Soginov, E.N. Morshinina, E.

Potekhina, V.M.Karimova, B.M.Umarov, E.Sh.Usmonov, E.G'oziev, M.Davletshin, F.A.Akramova, M.S.Salaeva, O.Shamieva, N.Salaeva, U.Saribaeva, X.Xaydarova, O.Abdusattarova, Sh.Shoyimova and others).

These works include demographic changes in the family, the role of Uzbek women in the family, attitudes to child rearing and marriage, satisfaction with marriage, problems of formation of new socio-psychological qualities in Uzbek girls, socio-psychological characteristics and phenomena of women leaders in pedagogical communities, psychological features were analyzed.

Life itself requires a new approach to women, a solution to the problem of women in the light of current realities. Changes in socio-economic practices, an important factor in the transition to a market economy - the ability to compete has come to the fore, and as a result, the liberalization of the labor force has intensified. In this regard, it is very important to determine the ability of women to compete, to help them to acquire this ability, to take into account existing secular experiences.

In recent years, there has been a further increase in women's participation in socio-economic activities. As a result, the level of their involvement in the manufacturing sector began to rise sharply. All of this has led to positive attitudes towards women's social protection.

The problem of efficiency in the system of labor training is also important in the context of economic changes. This requires people to have professional and personal maturity, readiness to change professions, to learn the techniques of microprocesses, that is, to constantly innovate. Women, in turn, will have to form a new approach to the problems of activity, find ways to solve them, be ready to take into account all the changes.

IV.Discussion

III. EMPIRICALLY EDUCATING THE PERSONAL CHARACTERISTICS OF BUSINESSMEN STUDY

Psychological theories substantiate that a person can be considered as a stage of human development in the historical and cultural development, formed in the social environment (L.S.Vygotsky, A.N.Leontev, S.L.Rubinstein, L.Abulkhanova-Slavskaya, K.K.Platonov, L.I.Bojovich, A.Maslow, E.Gaziev and others).

To study the personality traits embodied in the activities of women entrepreneurs, 90 women entrepreneurs were selected as the object of research. To do this, we used ten qualities of R.B. Kettell's "16-factor personality questionnaire" adapted to the local environment. It is used to promote initiative (A), emotional stability (C), leadership (E), social maturity

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(G), social resilience (N), confidence (J), self-confidence (Q), independence (Q2), self-control (Q3), personality traits such as excitability and tension (Q4) were investigated.

We applied the methodology to two categories of subjects. The first group included "successful" ("M +") women entrepreneurs, and the second group included "unsuccessful" ("M-") women entrepreneurs. (In categorizing entrepreneurs in this way, we based our performance on the results of their

activities, ie the subject "M +" is an entrepreneur with an effective performance, and "M-" is a group of women who are engaged in entrepreneurship for the first time or have many failures).

The results obtained (2009) are shown in the table below. In order to get a holistic view of the identity of women entrepreneurs, we will focus on each of the survey scales.

Entrepreneur is reflected in the activities of Uzbek women personality traits

Table 1.

№	Personality traits	«M+» entrepreneur Mx₁±m₁	«M-» entrepreneur Mx₂±m₂	T
1.	Entrepreneurship (A)	$7,18\pm1,38$	$5,91\pm0,93$	1,82
2.	Emotional stability (S)	$8,52\pm1,36*$	$6,35\pm1,03$	2,38
3.	Striving for leadership (E)	$7,0311,26*$	$5,76\pm1,14$	2,39
4.	Social maturity (G)	$6,32\pm1,12$	$5,60\pm0,92$	1,6
5.	Social resilience (N)	$8,82\pm1,46$	$7,00\pm1,27$	2,04
6	Reliability (J)	$5,45\pm1,29$	$6,28\pm1,02$	-1,0
7	Self-confidence (Q)	$6,56\pm1,16$	$5,26\pm0,83$	1,66
8	Independence (Q2)	$7,28\pm1,38$	$5,91\pm1,12$	1,95
9	Self - control (Q3)	$6,46\pm1,22$	$6,08\pm1,17$	0,71
10.	Excitement and tension (Q4.)	$7,29\pm1,35$	$6,31\pm1,24$	1,25

*p<0,05.

1. Initiative - Factor (A) helps to determine a person's openness (communication), openness, openness, kindness, dedication, attentiveness, willingness. The results of scientific research on the characteristics of entrepreneurship also show that communication is important for entrepreneurship. Effective use of communication is also one of the main tools in management activities.

In terms of turnover, women entrepreneurs "M +" scored 7.18 ± 1.38 points, and women entrepreneurs "M-" - 5.91 ± 0.93 points. The initiative of women entrepreneurs "M +" does not allow them to become sufficiently nervous in the voluntary management of personal behavior. This level of initiative in them indicates openness, attentiveness in dealing with individuals, far from nervousness. M- women entrepreneurs, on the other hand, had a higher score (5.91 ± 0.93 points). This indicates that their behavioral traits and abilities are not sufficiently developed, and sometimes they may even exhibit a negative trait specific to schizatomy.

Ethnically, we believe that in national psychology, Uzbek women are characterized by modesty, chastity, patience in social relations,

sensitivity, kindness, politeness, which is reflected in the relationship with their partners and subordinates.

2. Emotional stability (S). The results of women entrepreneurs on the nature of emotional stability showed that in their activities they are far from the characteristics of practicality, perseverance, composure, restraint, thoughtfulness and haste. M + entrepreneurs showed high levels of emotional stability (8.52 ± 1.36 points) and M- entrepreneurs had a relatively average value (6.35 ± 1.03 points). It was observed that M + women entrepreneurs are more emotionally stable, tolerant of frustration, have a wide range of interests, ability to work, emotional maturity, are more demanding of their subordinates, and have a realistic mood. In some cases, emotional rigidity and emotional indifference represent a strain on the nervous system.

In women with M +, low levels of tolerance, variability of interests, mood swings, sensitivity, and a tendency to fatigue quickly cause neurotic symptoms (6.35 ± 1.03 points). If this is taken more seriously or objectively, there will be a high degree of stability in the activities of women entrepreneurs. Emotional stability is a measure of the strength of the

'I' on the positive side and the weakness of the 'I' on the negative side. Of course, for effective entrepreneurship, the high power of the "I" is appropriate.

3. Striving for leadership (E). This scale assesses an individual's status among people and their propensity for leadership in interpersonal relationships. Low levels on this scale indicate the conformity of women entrepreneurs, their inability to defend their views, their lack of self-confidence, and their dependence.

Conversely, high results on the aspiration factor for leadership mean that they do not take their word for it, seek independence, do not count on others, do not take into account the values of social values, and so on. The results of our study were above average, ie "M +" was 7.03 ± 1.26 points for women entrepreneurs and "M-" was 5.76 ± 1.14 points. This indicates that the indicators of the aspiration factor for entrepreneurial Uzbek women have their own position, a tendency to independence, at least in part, a tendency to leadership, a tendency to speak out ("M +" is typical for entrepreneurs). We think that if the results were higher, this category of women entrepreneurs would be seen as a person who does not count on anyone, is aggressive, blames others, is violent, and is prone to conflict. It is natural that the excess of the socio-psychological characteristics of such entrepreneurs leads to a negative result of their performance.

The results in "M-" women entrepreneurs show that they are not free from the tendency to be independent, to be polite, to take responsibility at the same time with confidence, to be annoyed when they make a mistake.

4. Social maturity(G). This factor is sometimes referred to as the consciousness factor. The factor of social maturity means that a person adheres to the norms of behavior, relies on values, socializes his activities. Social maturity is a determinant of the strength or powerlessness of the 'Higher Self', reminiscent of the factor of the 'Self' power.

The fact that the average score of women entrepreneurs on this factor is 6.32 ± 1.12 ("M +") and 5.60 ± 0.92 points ("M-") indicates that they are based on ethical principles and the stability of the principles, as well as respects human values and assumes personal responsibility.

We observe that the performance of women entrepreneurs "M-" (5.60 ± 0.92 points) makes them also have their own personal principles, and more respect their relationships with relatives and friends. While they strive to strengthen responsibility and values, they are not immune to neglect, so they do not stand firm in their demands. This condition is caused by a greater commitment to forgiveness, compassion, and kindness. As a result, the above circumstances are sometimes a factor in failures. Also, social maturity

depends on the individual-typological characteristics of the personality of women entrepreneurs.

5. Social resilience(H). This factor helps to assess an individual's place in the social environment. In this regard, women entrepreneurs show a higher result than other factors (8.32 ± 1.46 ("M +"), 7.00 ± 1.27 points "M-"). We also have to interpret these results in general.

One of the hallmarks of entrepreneurship is social resilience. Because for entrepreneurs, shyness, insecurity, dependence, and a tendency to emotional tension lead to professional failure. During the period of independence, many were engaged in entrepreneurial activities, but for some the lack of material base, and for others the lack of socio-personal qualities led to the early termination of the activity. Social resilience, that is, activism, allows only women entrepreneurs who are able to continue their work in difficult conditions, risk-taking, self-reliant, and have stable qualities.

6. Reliability (J). In women entrepreneurs, the indicators on these factors were able to show a more reasonable reliability (6.45 ± 1.29 ("M +") and 6.28 ± 1.02 points "M-"). Of course, women entrepreneurs are confident in the early stages of their careers. We have come to the conclusion that, as experience increases, confidence increases, as well as the importance of circumstances and problematic situations, which sometimes lead to skepticism. Because it is better to be skeptical, to summarize one's thoughts, to be cautious and egocentric in one's actions, rather than to stabilize confidence in business.

7. Self-confidence(Q). Evaluates a person's propensity for composure, calmness, restlessness, depression, and emotion. According to this factor, women entrepreneurs scored 6.56 + 1.16 ("M +") and 5.25 ± 0.83 points ("M-"). Analyzing the results, "M +" shows a high level of self-confidence in entrepreneurs, their emotional-volitional and nervous system is more stable, balanced and strong. In "M-" entrepreneurs, a lower level of this factor indicates a state of anxiety, frustration, sensitivity to impressions in the process of setting clear goals and achieving them.This situation affects not only business activities, but also the inefficiency of other activities.

8. Independence (Q2). The average level of this factor ("M +" 7.28 ± 1.38 and "M-" 5.91 ± 1.12 points) indicates that entrepreneurs take responsibility, are ready to do everything, but do not reject the suggestions and recommendations of others. shows.

Women entrepreneurs should be in agreement with their employees and make their own decisions on the development of long-term, strategic plans of the enterprise, approval of the business plan. Because it is appropriate for them to be able to think independently, rather than becoming dependent on the opinions of others. These qualities are formed due to certain achievements in independent work, resulting in less need for social support, initiative and perseverance.

9. Self-control (Q3). The next factor assesses an individual's ability to meet social demands and manage perceptions about themselves. Of course, a high level of self-control is preferred for entrepreneurship.

The results show that Uzbek women entrepreneurs have achieved a high rate (6.46 ± 1.22 ("M +"), 6.08 ± 1.17 points ("M-")). They are committed to social and ethical norms. A strictly standardized attitude, on the other hand, leads to a tendency to work according to a plan, to be principled, to be in control of oneself.

10. Excitability and tension (Q4). In addition to describing the psychological characteristics of a person, changes in his nervous system can also be explained. Because any professional activity causes stress and a certain amount of effort in the person.

The results of the study suggest that in the nervous system and psychology of women entrepreneurs, excitability predominates, and their activities are generally chaotic. Because fluctuations in market relations and the threat of economic crises, constant competition, changes in production, business relations and exchange rates or the stock market lead

entrepreneurs to agitation and tension (7.29 ± 1,135 ("M +") and 6.31 ± 1.24 points ("M-").

The personality traits of Uzbek women entrepreneurs show that their experience is growing throughout their lives and activities. Indeed, the need for a comprehensive study of the psychological characteristics of women entrepreneurs in this area is not only a scientific but also a social need.

V. Conclusion

The personality traits of Uzbek women entrepreneurs are a modern modification of human qualities, including the tendency to behave, independent management of behavior, perseverance in emotional stability, thoughtfulness, self-control, as well as occasional frustration, social status, leadership, public interest, lack of confidence, risk-taking, reliability, occasional skepticism logic thinking and the ability to make decisions, to rely on self-control and printsipiallikka specific. This leads to the conclusion that in order to further develop entrepreneurship, it is necessary to get acquainted with the way of life, activities, personal qualities of people who have a special place in the world of business, and study their experiences.

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STATIONARY SOLUTION OF SOME EQUATIONS OF LONG SOLITARY WAVES PROPAGATING OVER THE SURFACE OF THE WATER OVER A SLOWLY CHANGING INCLINED BOTTOM

Abstract: *In this paper, particular stationary solutions of some equations of the theory of strongly nonlinear waves are found using the modified simple equation method and the method of tanh-coth functions. The results of these methods converge faster to an exact solution for some nonlinear problems. These methods are very effective for finding exact and approximate solutions for wide classes of problems of mechanics. By creating a phase portrait of solitary stationary waves, qualitative conclusions are made about the state of nonlinear and dispersion effects when solving the problems of wave propagation on a water surface.*

Key words: *modified simple equation method, tanh-coth functions method, approximate solution, particular solution, surface waves, phase portrait.*

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СТАЦИОНАРНОЕ РЕШЕНИЕ НЕКОТОРЫХ УРАВНЕНИЙ ДЛИННЫХ УЕДИНЕННЫХ ВОЛН, РАСПРОСТРАНЯЮЩИХСЯ ПО ПОВЕРХНОСТИ ВОДЫ НАД МЕДЛЕННО ИЗМЕНЯЮЩИМСЯ НАКЛОННЫМ ДНОМ

Аннотация: *В данной работе найдены частные стационарные решения некоторых уравнений теории сильно-нелинейных волн с помощью упрошенным методом укороченных разложений и методом tanh-coth функций. Результаты этих методов сходятся быстрее к точному решению для некоторых нелинейных проблем. Эти методы очень эффективны для нахождения точных и приближенных решений для широких классов проблем механики. Созданием фазового портрета уединенных стационарных волн сделаны качественные выводы о состояние нелинейных и дисперсионных эффектов при решении задач распространения волн на водной поверхности.*

Ключевые слова: *упрошенный метод укороченных разложений и метод tanh-coth функций, приближенное решение, частное решение, поверхностные волны, фазовый портрет.*

Введение

При изучение нелинейных волновых процессов основные учитываемые эффекты являются нелинейность и дисперсия. Известно, что учет нелинейности приводит к появлению в спектре волн высоких гармоник, которые могут формировать крутые фронты, а дисперсия, наоборот, приводит к разбеганию этих зарождающих гармоник [14]. Если эти две эффекты уравновешивается, то в изучаемое процессе возникают стационарные бегущие волны. Если рассматривается распространение волн по поверхности воды над переменным наклонным дном, то ожидается влияние дисперсии, амплитуда волны и искривление ее профили изменяются. Даже могут возникнуть и иногда долгое время существовать волны постоянного профиля, несмотря на определенного наклона дна. Поэтому, изучение волновой динамики требует учет широкий спектр явлений, связанных с нелинейностью, дисперсией, вязкости и трением. Для достижение этой цели сначала можно изучать распространения уединенных волн на водной поверхности. Этот процесс можно описать уравнениями теории сильно-нелинейных волн, так как, поверхностные длинные волны не могут распространятся без изменения формы. Именно учет влияние дисперсии позволяет решению вопроса изучения уединенных волн. Исходя из этого в работе [14] приведен более современные уравнения теории сильно-нелинейных волн, а также их упрошенные варианты. Там некоторые частные случаи этих уравнений решены аналитически или численно. Теория длинных волн широко и успешно используется для описания прибрежных волн и волн на тонких слоях вязких жидкостей [2, 5, 7, 16]. Несмотря на это остается актуальным усовершенствования методики решения таких нелинейных уравнений и многосторонний анализ их результатов [3, 4, 8, 14-16]. В данной работе найдены частные стационарные решения некоторых уравнений теории сильно-нелинейных волн с помощью упрошенным методом укороченных разложений [1, 6, 12, 13, 15], методом синус-косинус функций [9, 11] и методом tanh-coth функций [9, 10].

Постановка задачи. В общем виде требуется решить следующую нелинейное уравнение, заданное в неявной форме

$$F(u, u_t, u_x, u_{tt}, u_{xx}, ...) = 0, \qquad (1)$$

где $u=u(x,t)$ - неизвестная функция; x - координата; t – время; F - неявной функцией зависящая от $u(x,t)$ и его различные частные производные; $u_t = \partial u / \partial t$; $u_x = \partial u / \partial x$ и т.д.

В работе [14, с.210, форм. (7.24)] отмечены, что процесс распространения поверхностных волн по поверхности воды в одном направлении, начальная глубина которой очень медленно меняется в масштабе длины волны, учитывающий различные нелинейные эффекты (например, капиллярность, вязкость, трения о дно), можно описать нелинейным уравнением в размерных (физических) переменных вида

$$u_{tt} - ghu_{xx} - 2gh_x u_x - gh_{xx}u = \left(h^2/3 - \sigma/(\rho g)\right)u_{ttxx} -$$
$$- u_x u_{tt} - 2ghu_x u_{xx} + 3ghu_x^2 u_{xx} + \bar{s}u_t/(\rho h) +$$
$$+ 2(\bar{\mu}/\rho)(2hu_{txx} + 2h_x u_{tx} + h_{xx}u_t). \qquad (2)$$

В работе [14, с.207, форм. (7.1)] также отмечены, что уравнение (2) можно упростить фактором постоянства глубины (h = const), без вязкости ($\bar{\mu} = 0$) и трения о дно ($\bar{s} = 0$), а с учетом только капиллярности, дисперсию и нелинейности:

$$u_{tt} - ghu_{xx} = \left(h^2/3 - \sigma/(\rho g)\right)u_{ttxx} - u_x u_{tt} -$$
$$- 2ghu_x u_{xx} + 3ghu_x^2 u_{xx}, \qquad (3)$$

где дисперсионный член $\left(h^2/3 - \sigma/(\rho g)\right)u_{ttxx}$ учитывает влияния: $(h^2/3)u_{ttxx}$ - дисперсионные свойства поверхностных волн и $\sigma/(h\rho g)$ - эффект капиллярности, а остальные члены - нелинейности. Это уравнение приближенно справедливо, если глубина моря порядка 100 м, а длина волны больше 200 м.

Ниже рассмотрены вопросы нахождения частное стационарное решение вида уединенных волн, формируемые на водной поверхности, уравнения (3) и её частных случаев.

Алгоритмы упрощенного метода укороченных разложений, метода синус-косинус функций и метода tanh-coth функций.

Алгоритм 1. Основные этапы *упрощенного метода укороченных разложений*:

Шаг 1. Используя преобразование $u(x,t) = u(\xi)$ с «бегущей» координатой

$$\xi = x - Ct \qquad (4)$$

где C – скорость волны, мы можем переписать уравнение (1) как следующее нелинейное обыкновенное дифференциальное уравнение (ОДУ):

$$P(u, u', u'', u''', ...) = 0, \qquad (5)$$

где верхние индексы обозначают производные относительно ξ; P - неявная функция u и его полных производных относительно ξ. Затем интегрируем ОДУ (5) столько раз, сколько это возможно, устанавливая постоянную интегрирования равной нулю.

Шаг 2. Предположим, что формальное решение уравнения (5) может быть выражено следующим образом

$$u(\xi) = \sum_{k=0}^{N} a_k \left[\psi'(\xi)/\psi(\xi) \right]^k, \qquad (6)$$

где a_k $(k = 0, 1, 2, …, N)$ - произвольные постоянные, которые будут определены таким образом, который $a_N \neq 0$; $\psi(\xi)$ - неизвестная функция, которая будет определена позже.

Шаг 3. Положительное целое число N может быть определено, считая гомогенный баланс между самым высоким порядком производной и с самым высоким порядком нелинейности, появляющимся в уравнение (5).

Шаг 4. Вычисление всех необходимых производных $u', u'', u''', …$, входящие в уравнение (5) на основе (6) и подстановка их на место. Приравнивание все коэффициенты $\psi^{-j}(\xi)$ к нулю, где $j \geq 0$. Эта операция приводит к системе который может быть решен, чтобы найти a_k $(k = 0, 1, 2, …, N)$ и $\psi(\xi)$. Замена значений a_k и $\psi(\xi)$ в (6) заканчивает определение решения уравнение (1).

Алгоритм 2. Основные этапы *метода синус-косинус функций*:

Шаг 1. Повторяется 1-шаг 1-го алгоритма.

Шаг 2. Следуя выводам работ [9, 11, 15], решения (5) могут быть установлены в виде

$$u(\xi) = \lambda \sin^\nu(\mu\xi) \quad \text{или} \quad u(\xi) = \lambda \cos^\nu(\mu\xi), \qquad (7)$$

где λ, μ, ν - определяемые параметры; $|\xi| \leq 0{,}5\pi/\mu$.

Шаг 3. Как следствие, производные (7) становятся

$$u_\xi = \lambda \nu \mu \sin^{\nu-1}(\mu\xi)\cos(\mu\xi),$$

$$u_{\xi\xi} = \lambda \nu(\nu-1)\mu^2 \sin^{\nu-2}(\mu\xi) - \lambda \nu^2 \mu^2 \sin^\nu(\mu\xi)$$

или

$$u_\xi = -\lambda \nu \mu \cos^{\nu-1}(\mu\xi)\sin(\mu\xi), \qquad (8)$$

$$u_{\xi\xi} = -\lambda \nu^2 \mu^2 \cos^\nu(\mu\xi) + \lambda \mu^2 \nu(\nu-1)\cos^{\nu-2}(\mu\xi).$$

Шаг 4. Подставим соотношений (7) и (8) в приведенного уравнения (5) и будем решать полученную систему алгебраических уравнений с помощью компьютеризированных символических пакетов. Далее мы собираем все члены с функциями $\sin^\nu(\mu\xi)$ для балансирования синусов или $\cos^\nu(\mu\xi)$ для балансирования косинусов, и приравниваем к нулю их коэффициентов, чтобы получить систему алгебраических уравнений с неизвестными λ, μ, ν. Далее решим последующую систему, чтобы получить все возможные значения этих параметров.

Алгоритм 3. Основные этапы *метода tanh-coth функций*:

Шаг 1. Повторяется 1-шаг 1-го алгоритма.

Шаг 2. Следуя выводам работ [9, 10, 15], решения (5) могут быть установлены в виде

$$u(\xi) = \sum_{k=0}^{N} a_k y^k + \sum_{k=1}^{N} b_k y^{-k}, \qquad (9)$$

где $y = y(\xi) = \tanh(\mu\xi)$ или $y = y(\xi) = \coth(\mu\xi)$; a_k $(k = 0, 1, 2, …, N)$ и b_k $(k = 1, 2, …, N)$ - произвольные постоянные, которые будут определены таким образом, который $a_N \neq 0$ или $b_N \neq 0$; μ - определяемый параметр.

Шаг 3. Повторяется 3-шаг 1-го алгоритма.

Шаг 4. Повторяется 4-шаг 1-го алгоритма, но с учетом неизвестных коэффициентов a_k, b_k и неизвестной функции

$$y = y(\xi) = \tanh(\mu\xi) \quad \text{или} \quad y = y(\xi) = \coth(\mu\xi). \quad (10)$$

Основным преимуществом этих методов являются то, что они может быть применены непосредственно к большинству типов дифференциальных уравнения. Другим важным преимуществом этих методов являются то, что они способны значительно сократить размер вычислительной работы.

Результаты расчетов. Для нахождения частного стационарного решения уравнения (1) примем обозначение вида (4). В этом случае уравнение (3) преобразуется в ОДУ, которое имеет первый интеграл

$$(gh - C^2)u_\xi = B_1 C^2 u_{\xi\xi\xi} + B_2(u_\xi)^2 - gh(u_\xi)^3 + C_1. \quad (11)$$

Здесь $B_1 = \sigma/(\rho g) - h^2/3$; $B_2 = C^2/2 + gh$; C_1 – постоянная интегрирования.

Сначала введем обозначение $u_\xi = w$, $u_{\xi\xi\xi} = w''$ и вместо (11) получим более простое ОДУ относительно новое неизвестной функции w:

$$w'' + aw + bw^2 + cw^3 + d = 0. \qquad (12)$$

Здесь

$$a = (C^2 - gh)/(B_1 C^2); \quad b = B_2/(B_1 C^2);$$

$$c = -gh/(B_1 C^2); \quad d = C_1/(B_1 C^2).$$

Это уравнение с наличием третьего и пятого слагаемым отличается от уравнения Дуффинга. Для построения фазовой плоскости (w, w_ξ) уравнению (12) приведем к виду умножая ее на w_ξ и интегрируя один раз:

$$w'^2 + aw^2 + (2b/3)w^3 + (c/2)w^4 + 2dw + C_2 = 0, \quad (13)$$

где C_2 – постоянная интегрирования. На фазовой плоскости (w, w_ξ) точка (0, 0) устойчивого положения равновесия типа «узел», кроме того точки на полупрямой $w > w_0$ неустойчивого положения равновесия, а одна их них $(0, w_0)$ типа «седло». Фазовой портрет говорит о том, что по

поверхности воды могут существовать как периодические стационарные волны (им соответствуют движения по фазовым траекториям вокруг положения равновесия типа «узел»), так и уединенная стационарная волна (движение по «седло») (см. рис.1). Эти факты существуют только при определенных соотношениях нелинейных и дисперсионных эффектов.
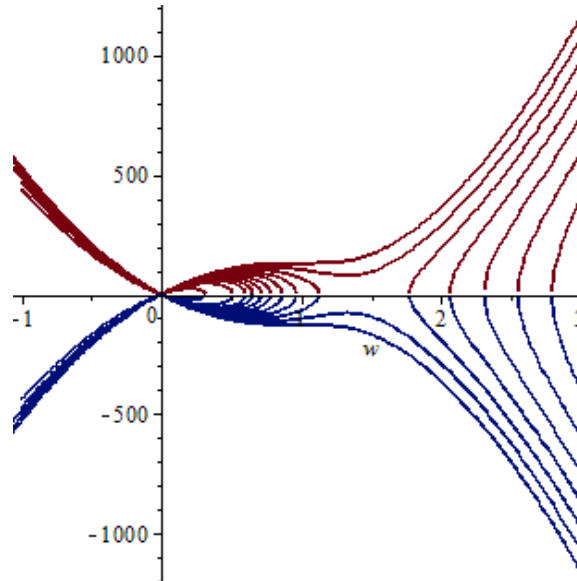

Рис.1.

Далее в работе [14] отмечены, что решения уравнения (13) может быть выражены в терминах эллиптических функций с двумя произвольными константами C_1 и C_2.

Теперь перейдем к решению уравнения (12) с помощью упрошенного метода укороченных разложений и методом tanh-coth функций.

Упрошенный метод укороченных разложений.

Предположим, что решение уравнение ОДУ (12) может быть выражено полиномом по $\psi'(\xi)/\psi(\xi)$ как показано в (6). Условие балансирование w^3 и w'' в уравнении (12) дает: $3N = N+2$, т.е. $N = 1$. Таким образом, мы можем написать (6) как следующая простая форма

$$w(\xi) = a_0 + a_1 \psi'(\xi)/\psi(\xi), \qquad (14)$$

где a_0 и a_1 - константы, которые будут определены таким образом, чтобы выполнялось условие $a_1 \neq 0$. Подставляя (14) в (13) и приравниваем к нулю коэффициентов ψ^0, ψ^{-1}, ψ^{-2}, ψ^{-3}, легко получим систему уравнений относительно неизвестных констант a_0 и a_1. Из первого кубического уравнения находим a_0, а из четвертого имеем $a_1 = \pm\sqrt{-2/c}$, тогда из второго и третьего уравнения получим

$$\frac{\psi'''}{\psi''} = \delta \quad \Rightarrow \quad \psi'' = c_2 e^{\delta\xi}; \qquad \psi' = c_2 m e^{\delta\xi} \quad \Rightarrow$$

$$\psi(\xi) = c_1 + \frac{c_2 m}{\delta} e^{\delta\xi},$$

где c_1, c_2 – постоянные интегрирования;

$$m = \frac{3}{(b+3ca_0)a_1}$$

$$\delta = -m(a + 2ba_0 + 3ca_0^2).$$

Отсюда имеем точное решение уравнение (13)

$$w(\xi) = a_0 + a_1 \frac{c_2 m \delta e^{\delta\xi}}{c_1\delta + c_2 m e^{\delta\xi}}, \text{ в частности это}$$

означает, что, если $c_1 = 1$, $c_2 m = \delta$, то уединенная стационарная волна имеет форму перепада (кинка) и описывается гиперболическим тангенсом: $w(\xi) = a_0 + (a_1\delta/2)(1 + \tanh(\delta\xi/2))$, а если $c_1 = -1$, $c_2 m = \delta$, то гиперболическим котангенсом:

$$w(\xi) = a_0 + (a_1\delta/2)(1 + \coth(\delta\xi/2)). \quad \text{Заметим,}$$

что произведение амплитуды уединенной волны на ее ширину является постоянной величиной $a_1 = const$.

Точное решение уравнение (11) равно

$$u(\xi) = a_0\xi + a_1 \ln\left(c_1\delta + c_2 m e^{\delta\xi}\right) + c_3,$$

а для (3) при $\xi = x - Ct$ имеем

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$$u(x,t) = a_0(x-Ct) + a_1 \ln\left(c_1\delta + c_2 me^{\delta(x-Ct)}\right) + c_3. \quad (15)$$

где c_3 – постоянное интегрирование.

Частные случаи. Теперь рассмотрим две упрошенные версии решения уравнения (3) и их будем решать, как в общем случае.

1. Пусть $c = 0$. Это соответствует к случаю постоянство глубины воды и не учету донное трение. В этом случае уравнение (12) примут вид

$$w'' + aw + bw^2 + d = 0 \quad (16)$$

На фазовой плоскости (w, w_ξ) уравнения (16) в этом случае точка $(0,0)$ является единственным устойчивым положением равновесия. Это положение равновесия типа «узел». Это означает, что в воде могут существовать только периодические стационарные волны.

Упрошенный метод укороченных разложений.

Предположим, что решение уравнение ОДУ (16) может быть выражено полиномом по $\psi'(\xi)/\psi(\xi)$ как показано в (6). Условие балансирование w^2 и w'' в уравнении (16) дает: $2N = N+2$, т.е. $N = 2$. Таким образом, мы можем написать (6) как следующая простая форма

$$w(\xi) = a_0 + a_1\psi'(\xi)/\psi(\xi) + a_2[\psi'(\xi)/\psi(\xi)]^2, \quad (17)$$

где a_0, a_1 и a_2 - константы, которые будут определены таким образом, чтобы выполнялось условие $a_2 \neq 0$. Подставляя (17) в (16) и приравниваем к нулю коэффициентов ψ^0, ψ^{-1}, ψ^{-2}, ψ^{-3}, ψ^{-4} легко получим систему уравнений относительно неизвестных констант a_0, a_1 и a_2. Из первого находим $a_0 = -a/(2b) \pm \sqrt{(a/(2b))^2 - d/b}$, а из пятого имеем $a_2 = -6/b$, тогда из второго и четвертого уравнения получим

$$\frac{\psi'''}{\psi''} = \delta \Rightarrow \psi'' = c_2 e^{\delta\xi}; \qquad \psi' = c_2 me^{\delta\xi} \Rightarrow$$

$$\psi(\xi) = c_1 + \frac{c_2 m}{\delta}e^{\delta\xi},$$

где c_1 и c_2 – постоянные интегрирования;

$m = \dfrac{5a_2}{a_1 + ba_1 a_2}$; $\delta = -m(a + 2ba_0)$. Из третьего получим уравнение относительно неизвестного a_1:

$$ba_1^2 - (3/m)a_1 + (2/m^2)a_2 - aa_2 - 2ba_0 a_2 = 0.$$

Тогда имеем точное решение уравнение

$$w(\xi) = a_0 + a_1\frac{c_2 m\delta e^{\delta\xi}}{c_1\delta + c_2 me^{\delta\xi}} + a_2\left(\frac{c_2 m\delta e^{\delta\xi}}{c_1\delta + c_2 me^{\delta\xi}}\right)^2.$$

2. Рассмотрим случай кубической нелинейности, когда $B_2(u_\xi)^2 = 0$, $C_1 = 0$ в уравнение (3). В этом случае мы имеем, что

$$u_{\xi\xi\xi} + \alpha u_\xi + \beta(u_\xi)^3 = 0. \quad (18)$$

где

$$\alpha = (C^2 - gh)/(B_1 C^2); \quad \beta = -gh/(B_1 C^2);$$

$$u_\xi = w; \quad w_{\xi\xi} = w''$$

и получим следующее ОДУ

$$w'' + \alpha w + \beta w^3 = 0. \quad (19)$$

Упрошенный метод укороченных разложений.

Предположим, что решение уравнение ОДУ (19) может быть выражено полиномом по $\psi'(\xi)/\psi(\xi)$ как показано в (6). Условие балансирование w^3 и w'' в уравнении (19) дает: $3N = N+2$, т.е. $N=1$. Таким образом, как и в предыдущих случаев, получим

$$a_0 = 0 \text{ или } a_0 = \pm\sqrt{-\alpha/\beta}; \quad a_1 = \pm\sqrt{-2/\beta}.$$

Частные случаи:

Случай 1. $a_0 = \pm\sqrt{-\alpha/\beta}$, $a_1 = \pm\sqrt{-2/\beta}$, тогда получим

$$\frac{\psi'''}{\psi''} = \delta \Rightarrow \psi'' = c_2 e^{\delta\xi}; \qquad \psi' = c_2 me^{\delta\xi} \Rightarrow$$

$$\psi(\xi) = c_1 + \frac{c_2 m}{\delta}e^{\delta\xi},$$

где c_1 и c_2 – постоянные интегрирования;

$$m = \frac{1}{\beta a_0 a_1}; \quad \delta = -\frac{\alpha + 3\beta a_0^2}{\beta a_0 a_1}.$$

Отсюда имеем точное решение уравнение (19)

$$w(\xi) = a_0 + a_1\frac{c_2 m\delta e^{\delta\xi}}{c_1\delta + c_2 me^{\delta\xi}}$$

или точное стационарное решение уравнения (3)

$$u(x,t) = a_0(x-ct) + a_1\ln(c_1\delta + c_2 me^{\delta(x-ct)}) + c_3.$$

Случай 2. $a_0 = 0$ и $a_1 \neq 0$, тогда получим

$$u(x,t) = a_1\ln(c_1\delta + c_2 me^{\delta(x-ct)}) + c_3,$$

где c_3 – постоянный интегрирования.

Метод tanh-coth функций.

Предположим, что решение уравнение ОДУ (16) может быть выражено полиномом по $y(\xi)$ как показано в (9). Условие балансирование w^3 и w'' в уравнении (16) дает: $3N = N + 2$, т.е. $N = 1$. Таким образом, мы можем написать (17) как следующая простая форма $w(\xi) = a_0 + a_1 y(\xi)$, где a_0 и a_1 - константы, которые будут определены таким образом, чтобы выполнялось условие $a_1 \neq 0$. Легко получим следующие равенства:

$$w(\xi) = a_0 + a_1 y; \quad w''(\xi) = 2\mu^2 a_1 y(y^2 - 1). \quad (20)$$

Эти выражения (20) подставляем в уравнение (16) и приравниваем к нулю коэффициентов y^0, y^1, y^2, y^3. Тогда имеем систему уравнений относительно неизвестных констант a_1 и b_1 и получим при $\mu = \pm 1$: $a_0 = 0$ или $a_0 = \pm\sqrt{-\alpha/\beta}$; $a_1 = \pm\sqrt{-2/\beta}$. Частные случаи:

Случай 1. $a_0 = \pm\sqrt{-\alpha/\beta}$ и $a_1 = \pm\sqrt{-2/\beta}$. Отсюда имеем точное решение уравнение (16) $w(\xi) = a_0 \pm a_1 \tanh\xi$ или точное решение уравнение (12)

$$u(x,t) = a_0(x - ct) \pm a_1 \ln(\cosh\xi) + c_3,$$

где c_3– постоянный интегрирования.

Случай 2. $a_0 = 0$ и $a_1 \neq 0$, тогда получим

$$u(x,t) = \pm a_1 \ln(\cosh\xi) + c_3.$$

Выводы.

Таким образом, приближенно решены уравнения поверхностных волн в частном случае и получены точные решения. Упрошенным метод укороченных разложений и метод tanh-coth функций успешно применены к решению некоторых эволюционных уравнений. Результаты расчетов проверены с помощью Maple. Эти методы полезны и для линейных и для нелинейных уравнений разного порядка и разного типа. Эти методы очень эффективны для нахождения точных и приближенных решений для широких классов проблем механики.

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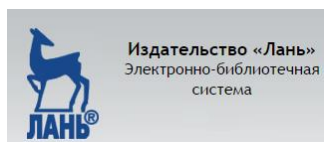
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