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THE CATEGORIES OF ONOMASTICS IN MODERN LINGUISTICS

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Abstract: In this article, Onomastics is the study of proper names. It deals of functional-semantic properties of onomastics. In addition, in the process of studying the composition of onomastics, it determines that the formation of the name and it is a factor that provides information about the categories of onomastics.

Key words: onomastics, anthroponymics, toponymy, zoonymics

The term onomastics comes from Greek ‘onoma’ and it means name. Onomastics is thus the study of proper names. As William Bright (2003) points out, such study is carried out as part of some larger fields like linguistics, ethnography, philology, history, philosophy, etc. Onomastics studies the basic laws of the history, development and functioning of proper names. possessing its own material and methodology for studying it, onomastics cannot but be an independent discipline. Since It Arose "At The Junction" of sciences, it is distinguished by the extreme complexity of the subject of study. The linguistic component dominates in onomastics, not only because each name is a word that develops according to the laws of the language, but also because the information of each name is “extracted” using linguistic means.

He, further on, discusses the term ‘name’ which, he says, people use when they refer to almost everything (e.g. “Banana is the name of the fruit.”). As he notices, in this example, the word ‘name’ is almost synonymous with the word ‘noun’

Nouns with the meaning of a person have repeatedly attracted the attention of researchers. Works in which the class of names of a person is investigated from the point of view of the content of its constituent

members can be divided into two circles. On the one hand, these are works devoted to the analysis of the semantic properties of individual lexical groupings in terms of their relationship with formal means of expression; on the other hand, there are works devoted to the semantic analysis of various lexica-semantic groups of words in the aspect of identifying their intrasystemic relationships

Onomastics consists of the following sections according to the categories of objects that have received famous names: anthroponymics - famous names of people; toponymy - popular names of geographical objects; te - onimika - the names of gods, goddesses, religious-mythical persons and creatures according to various religious ideas; zoonymics - names given to animals (conditionally); cosmonomics - the names of regions of space, galaxies, constellations, etc., which are common in scientific circulation and among the people; astronomy — studies the names of some celestial

bodies (planets and stars). In addition to the above, onomastics has several other divisions. Onomastics divides real names into realonyms (names of existing or existing objects) and mythonyms (names of imaginary objects).

Researchers pay little attention to clarifying the qualitative originality of *is* - a component of phraseological units, in contrast to the *is* itself. Meanwhile, it is this side of the issue that seems to us the most important and relevant. Comparison of *is* as such with *is* - a component of phraseological units, as well as with a common noun (*in*) helps to reveal the essence and specifics of each category, as well as to identify the points of their intersection. This approach, which involves a systematic analysis of these categories, makes it possible to determine their place in the corpus of the language, as well as the nature of their interaction in it. Before establishing what qualitative features are endowed with *is* - a component of a phraseological unit, it is necessary to determine the point of view on the nature of *is* as such, because the most contradictory judgments are expressed on this issue.

Thus, based on individual lexical and semantic groups of names of a person, provisions were developed on the level organization of the lexical system, on the structure of a separate lexical meaning, on the use of the method of component analysis in relation to specific nouns.

The signs were named on the basis of which the thematic organization of the class of names of a person can be determined: "occupation", "membership in social groups", "participation in smth.",

"Nationality", "place of residence", "internal qualities", "Personal relations", "social status", "property status", "age", "marriage relations", "external features", "family relations", etc.

Although in studies devoted to the study of nouns with the meaning of a person, a general lexical classification of this class of words was not developed, nevertheless, they determined a general principle that

can be used as the basis for constructing such a classification: from the most general classes to classes of more specific, to lexical groups and subgroups. This approach is determined, first of all, by the fact that

modern methods of researching lexical semantics allow us to approach the analysis of the meaning of a word as a complex unity, a complex of elementary semantic features, but which words can be combined or opposed to each other.

Onomastics is divided into literary and dialectal, usual (practical) and poetic, contemporary and historical, theoretical and practical types depending on the linguistic characteristics of famous names. Theoretical onomastics studies the emergence of famous names in language and speech, literary and dialectal fields, the basis of nomination (naming), development, various changes in this process, their use in

speech, distribution in certain regions and languages, and their structural structure. The study of poetic names in literary texts (poetic onomastics) is a special problem. Onomastics is also a comparative-historical, structural,

genetic, areal, onomastic mapping of linguistics, etc. using methods, phonetic, morphological, word formation, semantic, etymological, etc. learns aspects.

We also use the term ‘name’ when we think of ‘proper names’ although there is a general category of names. Bright distinguishes two principal types of proper names: personal names or anthroponyms and place names or toponyms (other varieties also exist, such as ethnonyms- terms referring to nationalities or ethnic groups; and glottonyms – referring to languages). Of the ones mentioned, only anthroponyms and toponyms will be discussed in this paper.

Proper names arose and exist as a means of distinguishing the individual from the mass, the individual from the general. this specific function determines the qualitative originality of is, their linguistic and social

significance. however, the autonomy of is as a special category of linguistic units should not be exaggerated, because in the language system all elements are interconnected and interdependent. so, despite the differences

of a functional-semantic nature, common nouns (in) also have points of contact.

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ONOMASTICS AS A BRANCH OF LINGUISTICS

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Abstract. This article examines, analyzes, and discusses the specifics of linguistics as a research object, the place of onomastics in Uzbek linguistics today, and its future prospects.

Key words: Poetic onomastics, practical onomastics, regional onomastics, theoretical onomastics, anthroponymy, culture.

A significant part of the work in modern linguistics is devoted to the study of the functioning of specific names in the literary text (Belousova E. A., Fonyakova A. A. and others). In my opinion, it is of particular interest to study the function of specific names in the folklore text, especially in folk songs, because if we consider the functions of the specific names in the folklore text, its characteristics can be determined. Onomastics (Greek onomastics - "the art of naming") is a branch of linguistics that studies proper names [1]. N.V. Podolskaya defines several types of onomastics as a science in her "Dictionary of Russian Onomastic Terminology" [2]. Poetic onomastics is considered a branch of onomastics that studies any unique names (poetonyms) in artistic literary works, and studies the principles of their creation, style, application in the text, perception by the reader, as well as the worldview and aesthetic attitudes of the author. Applied onomastics is a special field of onomastics research, which involves determining the norms of form, accent, pronunciation, transcription, spelling, deduction for specific names, as well as normative models of autonomic formations (autonomous names, names of the population, etc. on) is engaged in matters related to the practice of designation.

In this direction of onomastic research, subtypes of practical toponymy, practical anthroponymy, etc. are distinguished. Regional onomastics is a branch of onomastic research that has a local onomastic subsystem, belonging to a certain region. Such studies are usually related to one of the areas of onim space: toponyms, anthroponyms, astronoms. The purpose of such research is to determine the characteristics of names in a certain area and the relationship of its names (or types of names) with neighboring and / or even distant areas. Theoretical onomastics is onomastic research aimed at determining the general laws of the development and operation of onomic systems, and determining onomic universals [2]. Onomastics is an important part of linguistics. Going beyond the boundaries of linguistics is possible due to the extralinguistic components of onomastics that are mandatory for it. The familiarity of onymic systems of closed communities strongly connects names as

words with a wide range of social, ideological, biographical and other phenomena, which are perceived only by members of these communities and are not always understandable to the general population.

In this regard, Superanskaya A.V. compares proper names with terms, and onomastics as a science with terminology. Referring to A.A.Reformatsky's work "Linguistic Terminology" (2012), he writes: "A term is always a member of a certain term and does not have a single meaning within it, just as a proper name is always the property of a community, so a term is also the property of a community. Today, not only its objective-nominative relationship, but also the information related to it is clear" [3]. It is known that famous names are based on a certain image, a certain method of nomination, which is individual for each nation. In live speech, names are closely related to the reality, culture, tradition, religion, lifestyle, worldview of a particular people, nation. Onomastics is traditionally divided into sections according to the categories of objects that have their own names: anthroponymics -the names of people, toponymics -the names of geographical objects, zoonymics -the names of animals, astronomy -the names of individual celestial bodies, etc. learns Onomastics divides specific names into realonyms (names of existing or existing objects) and mythonyms (names of imaginary objects in myths, fairy tales, epics, etc.) [4]. The listed characteristics of the class of onyms certainly do not reveal all the issues related to determining the specific characteristics of the corresponding name. Various onomastic studies have noted many other features describing the respective names.

All researchers emphasize that the specific features of famous names are in their meaning, but their interpretation is slightly different. Some see originality in the weakening of meaning, and sometimes in its complete absence. So, famous names can be interpreted as empty symbols, labels, comparing them with numerical symbols. Other researchers attribute the distinctiveness of a popular name to its "hypertrophied nominativeness", with which they think that their special concreteness is associated. Many researchers recognize the complex, dialectical meaning of proper names as language units (often words). In the modern theory of the word, it is recognized that the meaning of the word is its content, which is understood approximately the same by the speaker and the listener and includes three types of relations [5]:

denotative -relation of the word to the object;

significant -attitude to the concept;

structural -the relationship of the meaning of the word, as well as the whole word with other words of a given language. A noun, an important unit of language, is a word or a phrase functionally similar to it, which has all types of noun relations - denotative, symbolic, and structural-linguistic, and their quality in a noun is unique.

Summarizing the consideration of own name as a language-speech category, we can say the following. Language, speech units -language, speech units that serve to emphasize the unique naming of separate objects of reality and are the result of such specialization. has developed some features in its meaning, grammatical structure and activity. The purpose of a distinguished name is to name a specific object, to associate it with a class of similar objects. For a famous name, naming a specific subject is mandatory, and its conceptual correlation is optional. Famous names can encode very rich and interesting information, the discovery of which often depends on the aspect of studying the famous name. Linguists who approach the famous name from the point of view of lexicology are engaged in the inventory of anonymous material, its genetic analysis, and comparison with appellatives.

Studying one's own name from the perspective of psychology helps to trace the historical changes of views, individual and social tastes related to names belonging to different historical periods, and sociological and historical aspects are also important and interesting. The cultural approach seems to be the most effective in studying the specific features of the use of famous names in folklore texts, that is, their focus. This is determined by the fact that specific names are a "product" of a certain era and a certain culture. If we understand culture, following Y. M. Lotman, as "a collection of non-hereditary information collected, stored and transmitted by various groups of people", we can include many material and spiritual elements here. horses help us [3].

Thus, famous names have bright national and cultural semantics, they belong to the group of joint vocabulary, because their meaning directly comes from the history and culture of the people. So, onomastics is an important branch of linguistics. The belonging of onomastics to linguistics is determined by the fact that specific names are words, the main methods of studying onomastics are linguistic, and a significant part of its terminology is linguistic. But there is also a separate system of terms in onomastics.

To sum up, onomastics is closely related to the development of society, national culture, traditions, and lifestyle, and serves as a unique step in understanding the national mentality. Famous names are a special linguistic category. They are language-speech units that serve as specific names for individual objects. The purpose of popular names is to name a specific object. For famous names, the first thing is to choose a topic, and the second is to correctly choose the connection of the topic with similar ones.

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ОЦЕНКА ВОСПРИЯТИЯ ТЕХНОЛОГИЧЕСКИХ ИННОВАЦИЙ РУКОВОДЯЩИМИ КАДРАМИ ВУЗОВ: МЕТОДИКА И РЕЗУЛЬТАТЫ ЭКСПЕРИМЕНТА

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Аннотация. В данной статье представлен анализ эксперимента, проведенного среди руководящих кадров высших образовательных учреждений, обучающихся по программе повышения квалификации в сфере 'Менеджмент системы образования'. Целью исследования являлось оценка восприятия и отношения к технологическим инновациям в образовательной сфере. Методология исследования включает серию педагогических приемов, нацеленных на стимулирование обсуждения и критического анализа существующих и потенциальных технологий в высшем образовании. Основное внимание в эксперименте уделялось анализу изменений и дополнений, внесенных слушателями в модели восприятия различных технологических концепций. Результаты показали активное участие и интерес участников к новшествам, особенно в контексте будущего применения технологий. Исследование подчеркивает важность непрерывного повышения квалификации и адаптации к быстро меняющимся технологическим трендам в высшем образовании.

Ключевые слова: оценка, восприятие, цифровые технологии, руководящие кадры вузов, повышение квалификации, эксперимент

ASSESSMENT OF THE PERCEPTION OF TECHNOLOGICAL INNOVATIONS BY UNIVERSITY MANAGEMENT PERSONNEL: METHODOLOGY AND RESULTS OF THE EXPERIMENT

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Abstract. This article presents an analysis of an experiment conducted among the executive staff of higher educational institutions, enrolled in a professional development program in 'Education System Management'. The aim of the study was to

assess their perception and attitude towards technological innovations in the field of education. The research methodology includes a series of pedagogical techniques aimed at stimulating discussion and critical analysis of existing and potential technologies in higher education. The main focus of the experiment was on analyzing changes and additions made by the participants to the models of perception of various technological concepts. The results showed active participation and interest of the participants in innovations, especially in the context of future application of technologies. The study highlights the importance of continuous professional development and adaptation to rapidly changing technological trends in higher education.

Keywords: assessment, perception, digital technologies, university executive staff, professional development, experiment

В эпоху стремительного развития цифровых технологий, вопрос адаптации образовательной среды и подготовки учебных кадров к новым вызовам становится особенно актуальным. Это особенно важно для высшего образования, где технологические инновации могут радикально изменить процесс обучения и взаимодействия со студентами. Руководящие кадры вузов, такие как деканы и проректора, играют ключевую роль в восприятии и внедрении этих инноваций. Однако, несмотря на важность этой темы, остается мало исследований, оценивающих их готовность и отношение к новым технологиям.

Проблемы адаптации кадров вузов к новым образовательным технологиям, а также влияния внедрения электронных конструкторов программ учебных дисциплин на кадры высших учебных заведений рассмотрены в работах [1] и [2]. В статье [3] авторы анализируют современное состояние и перспективы развития инновационной инфраструктуры вузов, а также предлагают меры по повышению их роли в инновационной экономике. В [4] осуществлен анализ современных методов трансфера результатов научных исследований вузов и проблем, стоящих на пути эффективного взаимодействия вузовской науки и бизнеса. Предложены меры по повышению инновационной активности вузов и содействию более эффективному внедрению результатов их научной деятельности в экономику. Основные проблемы развития инновационной деятельности, а также возникновения затруднений в этой области рассмотрены в работе [5]. В статье [6] рассмотрено влияние цифровых технологий на процессы обучения и управления в высшем образовании. Авторы анализируют основные цифровые технологии, такие как электронное обучение, массовые открытые онлайн-курсы, блокчейн, большие данные, машинное обучение, нейросети и т.д., и их применение в разных аспектах высшего образования, таких

как доступность, качество, эффективность, академическая честность, аттестация, аккредитация и т.д. Они также обозначают основные вызовы и риски, связанные с цифровизацией высшего образования, такие как неравенство, дискриминация, безопасность, этика, критическое мышление и т.д. В работе [7] авторы исследуют, как руководящие кадры среднего звена воспринимают эффекты разработки и реализации стратегического плана. Они анализируют институциональный контекст стратегического мышления в российской системе высшего образования и изменения в деятельности университетов под влиянием реализации стратегии. В статье [8] обоснована необходимость перехода от технологической к социальной инновации в рамках третьей миссии университетов. В работе [9] показана роль руководителей университетов в развитии технологической инновации в Бразилии и Португалии. Авторы исследуют факторы, влияющие на участие университетов в инновационных проектах, а также оценивают вклад университетов в создание и распространение новых технологий. Результаты показывают, что руководители университетов играют важную роль в формировании инновационной культуры и стимулировании сотрудничества с другими организациями. В статье [10] исследовано восприятие инновации руководителями университета в Мексике. Авторы проводят качественное исследование, основанное на интервью с руководителями разных уровней и функций в университете. Они выявляют различные типы инновации, которые руководители университета признают и поддерживают, а также проблемы и барьеры, с которыми они сталкиваются при внедрении инноваций. Приведенный обзор показывает значительный интерес к вопросам инноваций в высшем образовании, включая роль руководящих кадров вузов в процессе внедрения новых технологий. Тем не менее проблема восприятия технологических инноваций руководящими кадрами вузов остается открытой.

Целью данной статьи является оценка восприятия технологических инноваций руководящими кадрами вузов. Для достижения этой цели был проведен педагогический эксперимент, основанный на комбинированном методе активного и опережающего обучения с элементами самооценки и коллаборативного обучения. Этот метод предполагает вовлечение слушателей повышения квалификации в активные лекционные задания, а также представляет им возможность оценивать свой процесс и сотрудничать с другими участниками образовательного процесса в процессе обучения. Метод позволяет не только оценить текущее состояние знаний участников о технологических инновациях, но и проследить динамику их восприятия после информационного воздействия.

Эксперимент проводился в Институте переподготовки и повышения квалификации кадров системы высшего образования Республики Узбекистан.

Контингент слушателей программ повышения квалификации состоял из руководящих кадров высших образовательных учреждений, обучаемых по направлению курса повышения квалификации в сфере "Менеджмент системы образования". Это дало возможность получить представление о многообразии восприятия инноваций в разных образовательных учреждениях.

Тема лекции "Цифровые технологии в управлении высшим образованием". Согласно учебному плану, продолжительность лекции составляла 4 академических часа.

Для понимания процесса вовлечения и активизации руководящих кадров вузов в оценку технологических инноваций, была спланирована серия педагогических приемов, включающих в себя работу в подгруппах с применением визуальных методов, что способствовало коллективному обсуждению и анализу идей, а также предоставляло возможность каждому участнику отражать и оценивать свои знания и взгляды на инновации до и после информационного воздействия, предоставленного в ходе последующей лекции.

На первом этапе после представления слушателям и объявлении темы занятия, следует разъяснение структуры предстоящих занятий с акцентом на ключевых аспектах и ожидаемых результатах. Для наглядного демонстрирования на доске создается модель, представляющая матрицу 2×2, состоящая из четырех четвертей. Каждая четверть представляет собой различные комбинации технологий, которые используются или будут использоваться в вузах (существующие технологии – новые технологии), в которых работают слушатели и студентов, которые учатся или будут учиться в их вузах (существующие студенты-новые студенты) (Рис.1).

		существующие технологии			
существующие студенты	Отражают технологии, уже применяемые в учебном заведении и известные слушателям	и	известные	Отображает перспективы использования существующих технологий будущими студентами	новые студенты
	Показывает уровень осведомленности руководящих кадров ВУЗов о новых технологиях, используемых студентами	уровень	руководящих	Отображает ожидания относительно внедрения новых технологий среди будущих студентов	
		новые технологии			

Рис.1. Матрица взаимодействия технологий и студентов в образовательной среде

Модель обеспечивает визуализацию взаимосвязей между текущим и потенциальным использованием технологий в образовательных учреждениях, а также влиянием этих технологий на различные когорты студентов. Время, отведенное на этот этап, составляет 5 минут, что обеспечивает краткость и ясность изложения, необходимые для эффективного восприятия и понимания представленной информации.

На втором этапе лекционного занятия слушатели подразделяются на подгруппы. Каждой подгруппе предоставляются инструменты, такие как маркеры, ватманы или интерактивные доски, для того чтобы они могли визуализировать и обсудить технологии, которые в настоящее время используются в их учебных заведениях, а также технологии, планируемые к внедрению в будущем. Этот этап предполагает активное участие слушателей в процессе анализа и обмена опытом, позволяя им не только представить существующие технологии, но и исследовать потенциальные инновации для улучшения образовательного процесса. Для выполнения этой задачи отводится временной интервал в 10-12 минут.

На третьем этапе лекционного занятия каждая подгруппа представляет результаты своей работы остальным участникам. Это дает возможность обсудить и проанализировать разнообразные подходы к использованию и внедрению технологий в образовательном процессе. Презентации каждой группы ограничены временным интервалом от 5 до 10 минут, который может варьироваться в зависимости от активности дискуссии и количества вопросов, задаваемых другими участниками. Этот этап способствует взаимному обучению и позволяет участникам глубже понять различные перспективы и подходы к технологическим инновациям в высшем образовании.

На четвертом этапе проводится лекция, которая расширяет понимание слушателей о применении цифровых технологий в высшем образовании. В ходе лекции представляется обширная информация, включающая не только теоретические аспекты и практические кейсы, но и множество видеоматериалов. Эти материалы демонстрируют лучшие мировые практики использования цифровых технологий в образовательном процессе. Цель этого этапа - не только передать актуальные знания, но и визуально показать успешные примеры интеграции технологий, что способствует глубокому пониманию темы и стимулирует обсуждение инновационных подходов в образовании. Временной интервал, отведенный для этого этапа, составляет 115-120 минут.

На заключительном этапе лекции слушателям вновь предоставляются ватманы, которые они использовали ранее, а также маркеры другого цвета. В случае использования интерактивной доски слушателям предоставляется доступ к доске, на которой они уже отметили ключевые технологии, используемые в их

образовательных учреждениях. Это дает участникам возможность дополнить свои модели информацией о тех технологиях, с которыми они познакомились в ходе лекции. По окончании каждая подгруппа демонстрирует результаты другим участникам процесса. Временной интервал этого этапа составляет 10-15 минут.

Такой подход позволяет наглядно отразить приобретенные знания и увидеть, как новая информация интегрируется в их текущее понимание технологических инноваций в образовательной сфере. Этот визуальный и интерактивный метод не только укрепляет усвоение новой информации, но и способствует глубокому осмыслению и анализу полученных знаний участниками.

На рисунке 2 представлена динамика обучения в рамках эксперимента, иллюстрирующая активное обсуждение, демонстрацию моделей и выступления участников.



Рис.2. Динамика обучения: Эксперимент в действии

В результате проведенного эксперимента было заметно, что руководящие кадры высших образовательных учреждений продемонстрировали значительный интерес и вовлеченность в процесс изучения и обсуждения цифровых технологий в управлении высшим образованием. Анализ моделей, созданных участниками на различных этапах лекции, позволил оценить динамику изменения их восприятия технологических инноваций. Особое внимание уделялось тому, как новые знания интегрировались в их профессиональную деятельность и видение будущего образовательного процесса.

Для оценки восприятия технологических инноваций руководящими кадрами вузов перейдем к анализу результатов эксперимента.

Для проведения анализа была сформирована выборка, включающая 40 наблюдений, проведенных в ходе реализации эксперимента. Основное внимание

уделялось оценке изменений и дополнений, внесенных слушателями по окончании лекционного занятия для каждого сектора модели.

Процентное соотношение внесенных дополнений и изменений распределилось следующим образом (Рис. 3): для сектора 'Существующие технологии - Существующие студенты' дополнений было внесено 12%, для 'Новые технологии - Существующие студенты' изменений и дополнений было внесено 17%. В свою очередь, для сектора 'Существующие технологии - Новые студенты' уровень изменений и дополнений достиг 45%, а для 'Новые технологии - Новые студенты' - 50%.

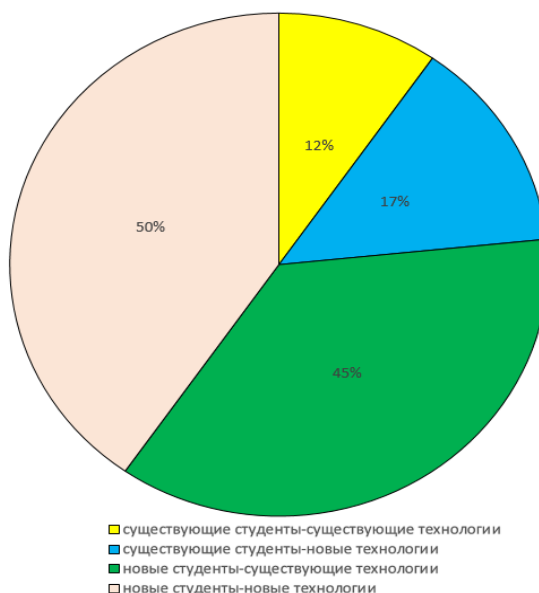


Рис. 3. Процентное соотношение внесенных дополнений и изменений

Процентное распределение внесенных изменений и дополнений в различных секторах модели демонстрирует, как участники реагировали на разные комбинации технологий и студентов. Особенно примечательно, что наибольшее количество изменений было внесено в сектора, связанные с новыми технологиями и новыми студентами, что может указывать на высокую заинтересованность и активность участников в исследовании и применении новых образовательных технологий. Эти результаты свидетельствуют о значительной активности слушателей в процессе адаптации к новым технологиям и готовности к их внедрению в образовательный процесс, что является важным фактором для дальнейшего развития и инноваций в высшем образовании.

В таблице 1 отражены результаты анализа внесенных участниками эксперимента изменений в модели восприятия технологических инноваций.

Таблица 1. Результаты анализа динамики восприятия технологических инноваций руководящими кадрами вузов

Состояние	Результат изменений	Результаты анализа
технологии, уже применяемые в учебном заведении и известные слушателям	12%	свидетельствует о стабильности основного набора технологий, используемых в образовательном процессе
уровень осведомленности слушателей о новых технологиях, используемых студентами	17%	подтверждает активное использование и освоение студентами новых технологий
ожидания относительно внедрения новых технологий среди будущих студентов	45%	указывает на потенциальную сложность прогнозирования и оценки адаптации будущих студентов к текущему технологическому ландшафту
ожидания относительно внедрения новых технологий среди будущих студентов	50%	предсказуемый результат, связанный с активной информационной подготовкой слушателей во время лекций, что позволяет им активно включаться в дискуссии о перспективных технологических тенденциях

Анализ таблицы 1 показывает, что руководящие кадры высших учебных заведений демонстрируют различный уровень готовности к интеграции технологических инноваций, с наибольшей активностью по привлечению новых технологий для будущих студентов

Важно отметить, что в ходе эксперимента было обнаружено общее недопонимание разницы между терминами 'технология' и 'устройство' со стороны слушателей. Они часто классифицировали устройства, такие как компьютеры и принтеры, как технологии, что указывает на возможную проблему в понимании этих концепций. Это обнаружение позволило внести коррективы в образовательный процесс, уточнить определения и улучшить уровень понимания слушателями разницы между этими терминами.

В рамках проведенного эксперимента было установлено, что руководящие кадры высших учебных заведений демонстрируют значительный интерес и активность в отношении освоения и применения цифровых технологий в

образовательном процессе. Особенно это касается интеграции новых технологий в контексте будущих изменений в высшем образовании. Результаты анализа моделей показали, что наибольшее количество изменений и дополнений было внесено в сектора, связанные с новыми технологиями и будущими студентами, что свидетельствует об осведомленности и готовности к принятию будущих инноваций. Обнаруженное недопонимание между терминами 'технология' и 'устройство' указывает на необходимость дальнейшего образовательного просвещения и уточнения этих концепций в обучающем контенте. В целом, результаты исследования подчеркивают важность непрерывного обучения и профессионального развития руководящих кадров вузов, особенно в свете постоянно развивающихся технологий. Это подтверждает необходимость внедрения адаптивных и гибких подходов к обучению, способствующих эффективному использованию и пониманию новейших технологических достижений.

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MA’MURIY NAZORAT VA PROFILAKTIK HISOB INSTITUTINI BEKOR QILGAN HOLDA PROFILAKTIK NAZORAT INSTITUTINI JORIY QILISH

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ANNOTATSIYA

Maqolada Ma‘muriy nazorat hamda profilaktik hisobga olingan shaxslar bilan profilaktik suhbat o‘tkazish, hisobga qo‘yish va hisobdan chiqarish tartibini amalga oshirish usullari, profilaktik hisobda turgan shaxslarga nisbatan yurtilgan profilaktik hisobni amalga oshirish tartibi va shu kabi boshqa holatlar ilmiy tahlil qilingan hamda bu borada tegishli takliflar ilgari surilgan.

Kalit so‘zlar: ma‘muriy nazorat profilaktik hisob, hisobga qo‘yish, hisobdan chiqarish, profilaktika inspektori, huquqbuzarlik, profilaktika, yakka tartibdagi profilaktika, xorijiy tajriba.

ABSTRACT

In the article, the methods of conducting a preventive interview with preventively registered persons, implementing the procedure for recording and de-registration, the procedure for implementing preventive accounting against persons on preventive registration and other similar cases are scientifically analyzed and relevant proposals are put forward in this regard. .

Key words: preventive accounting, accounting, write-off, preventive inspector, crime, prevention, individual prevention, foreign experience.

АННОТАЦИЯ

В статье научно анализируются проведение профилактического собеседования с лицами, состоящими на профилактическом учете, проведение процедуры учета и снятия с учета, порядок ведения профилактического учета для лиц, находящихся на профилактическом учете, и аналогичные случаи и вносятся соответствующие предложения. вперед. В этом отношении. .

Ключевые слова: профилактический учет, учет, списание, профилактический инспектор, преступление, профилактика, индивидуальная профилактика, зарубежный опыт.

KIRISH

Jamiyatimiz rivojlanib borgan sari, huquqbuzarliklar sodir etish mexanizmlari ham murakkablashib borayotganini ko‘rishimiz mumkin. Shu boisdan bugungi kunda sodir etilayotgan huquqbuzarliklar profilaktikasini samarali tashkil etish va uni amalga oshirishda nafaqat ichki ishlar organlari, balki barcha huquqni muhofaza qiluvchi organlar hamda boshqa tashkilotlar bilan hamkorlikdagi faoliyatining o‘rni muhim yo‘nalishlaridan biridir.

O‘zbekiston Respublikasi Prezidentdi Shavkat Mirziyoyevning **“Qonun va adolat – ustuvor, jinoyatga jazo – muqarrar”** degan tamoyil asosida jamiyatimizda qonunga hurmat, huquqbuzarlik holatlariga murosasizlik hissini kuchaytirishga qaratilgan ishlarimizni jadal davom ettiramiz. Bu borada huquqbuzarlik holatlarining oldini olishga alohida e‘tibor qaratiladi. Buning uchun avvalo, mahalla imkoniyatlaridan keng foydalanish, profilaktika inspektorlarining ish samarasi va masuliyatini oshirish, ular uchun munosib xizmat va turmush sharoitini yaratib berish choralari ko‘rishimiz darkor” deb ta’kidlab o‘tganlar. [1]

Bugungi kunda, asosiy e‘tibor, voyaga yetmaganlar va yoshlar tarbiyasiga qaratilib, o‘quvchi va talabalarning huquqiy ongi va madaniyatini oshirish, ularning ta’lim muassasalaridagi davomatini ta’minlash bo‘yicha tizimli ishlar amalga oshirilmoqda.

Buning natijasida Respublikamizda voyaga yetmaganlar, yoshlar o‘rtasida shu jumladan maktab va litsey o‘quvchilari o‘rtasida sodir etilayotgan jinoyatlarning salmigi kamayishiga erishilmoqda. Ichki ishlar organlari tomonidan huquqbuzarliklarning yakka tartibdagi profilaktikasi shaxsning ijtimoiy muhitining o‘ziga xos xususiyatlari, ijtimoiy maishiy sharoitlari va turmush tarzi, g‘ayriijtimoiy xulq-atvorini, huquqbuzarlik sodir etishga moyilligini, shuningdek sodir etilgan huquqbuzarlikning ijtimoiy xavflilik darajasini tavsiflovchi boshqa omillar hisobga olingan holda belgilanadi. Profilaktika suhbatlari ichki ishlar organlarining huquqbuzarliklar profilaktikasini bevosita amalga oshiruvchi sohaviy xizmatlari xodimlari tomonidan o‘tkaziladi.

Profilaktika suhbatlari ichki ishlar organlarining huquqbuzarliklar profilaktikasini bevosita amalga oshiruvchi sohaviy xizmatlari joylashgan yerda, ichki ishlar organlarining tayanch punktlarida, shuningdek shaxsning yashash, o‘qish, ish joyida yoxud bevosita g‘ayriijtimoiy xulq-atvor yoki huquqbuzarlik aniqlangan joyda o‘tkaziladi.

ADABIYOTLAR TAHLILI VA TADQIQOT METODIKASI

Profilaktika suhbatlari davomida shaxsning o‘ziga xos xususiyatlari, uning turmush tarzi va ijtimoiy-maishiy yashash sharoitlari, shuningdek g‘ayriijtimoiy xulq-atvorning yoki sodir etilgan huquqbuzarlikning sabablari va shart-sharoitlari aniqlanadi. Profilaktika suhbatlari shaxsni profilaktik hisobga qo‘yishda ham o‘tkaziladi. Profilaktik

hisobga olish O‘zbekiston Respublikasining “Huquqbuzarliklar profilaktikasi to‘g‘risida”gi qonunosti hujjatlarida nazarda tutilgan shaxslarga nisbatan ularning tuzalishi va takroran huquqbuzarlik sodir etishining oldini olish maqsadida ichki ishlar organlari tomonidan amalga oshiriladigan profilaktika tadbirlari majmuidir.

Profilaktik hisobga olish ishlari, ilgari sudlanganlar ular jinoiy jazoni o‘taganidan so‘ng (o‘ziga nisbatan ma‘muriy nazorat o‘rnatilgan shaxslar bundan mustasno), o‘ziga nisbatan sudning jazo tayinlanmagan ayblov hukmi qonuniy kuchga kirgan shaxslarga, O‘zbekiston Respublikasi Jinoyat-protsessual kodeksining 84-moddasiga muvofiq aybdorlik to‘g‘risidagi masala hal qilinmasdan turib o‘ziga nisbatan jinoyat ishi tugatilgan yoxud reabilitatsiya qilmaydigan asoslar bo‘yicha jinoyat ishini qo‘zg‘atishni rad etish to‘g‘risidagi qaror chiqarilgan shaxslarga, o‘ziga nisbatan qamoqqa olish bilan bog‘liq bo‘lmagan ehtiyot chorasi tanlangan jinoyat sodir etishda ayblanuvchilarga, shuningdek, O‘zbekiston Respublikasi Ma‘muriy javobgarlik to‘g‘risidagi kodeksining 40, 41, 45, 47, 52, 56, 58, 61, 106, 131, 1651, 183, 1841, 1842, 1843, 187, 188, 1881, 189, 1891, 190, 191, 201, 202, 2021, 240, 241-moddalarida nazarda tutilgan ma‘muriy huquqbuzarliklarni sodir etganlarga hamda ixtisoslashtirilgan o‘quv-tarbiya muassasalaridan qaytgan shaxslarga nisbatan yuritilishi belgilangan.[2]

Profilaktika ishini yuritayotgan xodim profilaktik hisobda turgan shaxsga nisbatan individual profilaktik chora-tadbirlarni amalga oshirishda shaxsning yoshi, jinsi, ruhiy holati, ijtimoiy ahvoli, ma‘lumoti va mutaxassisligi, ehtiyojlari, qiziqishlari, qobiliyatlari kabi shaxsiy xususiyatlarini e‘tiborga olishi lozim.

Shuningdek, Ichki ishlar organlari huquqbuzarliklar profilaktikasi bo‘linmalarida hamda ichki ishlar organlarining tayanch punktlarda jinoyat va huquqbuzarliklarni oldini olish maqsadida, quyidagi huquqbuzarlik sodir etishga moyil bo‘lgan shaxslarning ro‘yxati yuritilishi belgilangan:

surunkali alkogolizmga muhtalo bo‘lgan shaxslar;

giyohvandlikka chalingan shaxslar;

zaharvandlikka chalingan shaxslar;

ruhiy kasallar; tanosil kasalliklariga chalingan shaxslar; doimiy yashash joyidan uzoq muddatga chiqib ketgan shaxslar;

jazoni ijro etish inspeksiyalari hisobida turgan hamda ichki ishlar organlari profilaktik hisobida turish muddati tugaganligi sababli profilaktik hisobdan chiqarilgan, ammo O‘zbekiston Respublikasi Jinoyat kodeksining 78-moddasida ko‘rsatilgan sudlanganlik holati tugallanmagan ilgari sudlangan shaxslarning ro‘yhatlari yuritiladi.

O‘zbekiston Respublikasi Prezidentining 2021-yil 26-martdagi “Jamoat xavfsizligini ta‘minlash va jinoyatchilikka qarshi kurashish sohasida ichki ishlar organlari faoliyatini sifat jihatidan yangi bosqichga ko‘tarish chora-tadbirlari

to‘g‘risida”gi PF-6196-son Farmoniga muvofiq, shuningdek, mamlakatimizda jamoat xavfsizligini ta‘minlash tizimini yanada rivojlantirish hamda ushbu sohadagi davlat siyosatining istiqbolli yo‘nalishlarini belgilash maqsadida, O‘zbekiston Respublikasi Prezidentining “O‘zbekiston Respublikasi jamoat xavfsizligi konsepsiyasini tasdiqlash va uni amalga oshirish chora-tadbirlari to‘g‘risida”gi (2021 yil 29 noyabr) PF-27-son farmoni qabul qilindi.

Farmonga muvofiq, O‘zbekiston Respublikasi jamoat xavfsizligi konsepsiyasi [1-ilovaga](#) muvofiq, 2022-2025-yillarda O‘zbekiston Respublikasida jamoat xavfsizligini ta‘minlash tizimini rivojlantirish strategiyasi [2-ilovaga](#) muvofiq, 2022-2025-yillarda O‘zbekiston Respublikasida jamoat xavfsizligini ta‘minlash tizimini rivojlantirish strategiyasini 2022-yilda amalga oshirish bo‘yicha “yo‘l xaritasi” [3-ilovaga](#) muvofiq tasdiqlangan.

O‘zbekiston Respublikasi jamoat xavfsizligi konsepsiyasi [1-ilovaga](#), 2022-2025 yillarda O‘zbekiston Respublikasida jamoat xavfsizligini ta‘minlash tizimini rivojlantirish strategiyasi [2-ilovaga](#), 2022-2025 yillarda O‘zbekiston Respublikasida jamoat xavfsizligini ta‘minlash tizimini rivojlantirish strategiyasini 2022-yilda amalga oshirish bo‘yicha “yo‘l xaritasi” [3-ilovaga](#) muvofiq tasdiqlandi.

Mazkur farmon asosida tasdiqlangan “2025-yillarda O‘zbekiston Respublikasida jamoat xavfsizligini ta‘minlash tizimini rivojlantirish strategiyasi”ga muvofiq, jamoat xavfsizligini ta‘minlash sohasidagi munosabatlarni tartibga solish, tizimlashtirish hamda mavjud huquqiy bo‘shliq va ziddiyatlarni bartaraf etish, jamoat tartibini saqlash, huquqbuzarliklar profilaktikasi, yo‘l harakati xavfsizligini ta‘minlash va probatsiya faoliyatini uyg‘unlashtirish, jamoat tartibini saqlash, shu jumladan ommaviy tadbirlarni o‘tkazishga jalb qilinadigan vazirlik va idoralar kuch va vositalarining birgalikdagi harakatlanish algoritmini ishlab chiqish va uni doimiy takomillashtirib borish, jamoat xavfsizligini ta‘minlash faoliyatiga zamonaviy shakl va ish usullarini hamda ilg‘or axborot texnologiyalarini keng joriy etish, jamoat xavfsizligi tizimini raqamlashtirishni 90 foizga yetkazish orqali xizmat faoliyatida inson omilini minimallashtirish, profilaktik hisob, ma‘muriy nazorat va probatsiya nazoratidagi shaxslar tomonidan qayta jinoyat sodir etilishini keskin kamaytirish yuzasidan vazifalar belgilangan.

Shuningdek, mazkur farmon bilan tasdiqlangan 2022-2025-yillarda O‘zbekiston Respublikasida jamoat xavfsizligini ta‘minlash tizimini rivojlantirish strategiyasini 2022-yilda amalga oshirish bo‘yicha “YO‘L XARITASI” da, profilaktik hisob, ma‘muriy nazorat va probatsiya nazoratidagi shaxslarga o‘rnatiladigan cheklovlar, shuningdek, ularning zimmasiga yuklanadigan majburiyatlar doirasini va ularga rioya etilishini ta‘minlash mexanizmlarini aniq belgilash:

Profilaktik hisob, ma‘muriy nazorat va probatsiya nazoratidagi shaxslarning o‘rnatilgan cheklovlarga rioya etilishini va ularning zimmasiga yuklangan

majburiyatlarni bajarishini ta'minlash, tekshirish va nazorat qilish, shuningdek, ushbu shaxslarga tarbiyaviy va huquqiy ta'sir choralarni qo'llash hamda ularni ijtimoiy moslashtirish bo'yicha “Harakatlar protokoli”ni ishlab chiqish va amaliyotga tatbiq etish;

Ma'muriy nazorat va profilaktik hisob institutlari negizida profilaktik nazorat institutini joriy qilish vazifalari belgilangan.

В соответствии с постановлением, Концепция общественной безопасности Республики Узбекистан согласно приложению 1, стратегия развития системы общественной безопасности в Республике Узбекистан на 2022-2025 годы согласно приложению 2, содействие развитию общественной безопасности в Республике Узбекистан на 2022-2025 годы Утверждена «Дорожная карта» реализации стратегии развития системы снабжения в 2022 году согласно приложению 3.

Концепция общественной безопасности Республики Узбекистан приложена к приложению 1, стратегия развития системы общественной безопасности Республики Узбекистан на 2022-2025 годы - к приложению 2, стратегия развития общественной безопасности системы в Республике Узбекистан в 2022-2025 годах утверждена «дорожная карта» реализации согласно приложению 3.

В соответствии со «Стратегией развития системы общественной безопасности в Республике Узбекистан на 2025 год», утвержденной на основании настоящего постановления, регулирование и систематизация отношений в области общественной безопасности и устранение существующих правовых пробелов и коллизий, обеспечение общественного порядка, разработка алгоритма совместного движения сил и средств министерств и ведомств, занимающихся профилактикой правонарушений, обеспечением безопасности дорожного движения и координацией пробационной деятельности, поддержанием общественного порядка, в том числе публичными мероприятиями, и постоянным его улучшением, общественным безопасностью широкое внедрение современных форм и методов работы и передовых информационных технологий при оказании услуг, минимизация человеческого фактора в сервисной деятельности за счет повышения цифровизации системы общественной безопасности до 90%, предотвращение рецидивов преступлений со стороны лиц, находящихся под административным контролем и пробационным контролем. определены задачи сокращения.

Также в «ДОРОЖНОЙ КАРТЕ» по реализации Стратегии развития системы общественной безопасности в Республике Узбекистан на 2022-2025 годы, утвержденной настоящим постановлением, лицам, состоящим на профилактическом учете, административном контроле и контроле пробации,

четко определены устанавливаемые лимиты, а также объем возлагаемых на них обязательств и механизмы обеспечения их соблюдения:

Обеспечение, проверка и контроль соблюдения лицами, находящимися на профилактическом учете, административном контроле и пробационном контроле, установленных ограничений и выполнения возложенных на них обязанностей, а также применение воспитательных и правовых мер к этим лицам и их социальной адаптации, разработка и реализация «Протокол действий» по;

На основе институтов административного контроля и профилактического учета определены задачи внедрения института профилактического контроля.

In accordance with the decree, the concept of public safety of the Republic of Uzbekistan in accordance with Appendix 1, the strategy for the development of the public safety system in the Republic of Uzbekistan in 2022-2025 in accordance with Appendix 2, the promotion of public safety in the Republic of Uzbekistan in 2022-2025 The “road map” for the implementation of the strategy for the development of the supply system in 2022 was approved in accordance with Appendix 3.

The concept of public safety of the Republic of Uzbekistan is attached to Appendix 1, the strategy for the development of the public safety system in the Republic of Uzbekistan in 2022-2025 is attached to Appendix 2, the strategy for the development of the public safety system in the Republic of Uzbekistan in 2022-2025 the implementation "road map" was approved according to Annex 3.

In accordance with the “Strategy for the development of the public safety system in the Republic of Uzbekistan in 2025” approved on the basis of this decree, regulation and systematization of relations in the field of public safety and elimination of existing legal gaps and conflicts, maintenance of public order, development of an algorithm for the joint movement of forces and means of ministries and agencies involved in the prevention of offenses, ensuring traffic safety and coordinating probation activities, maintaining public order, including public events, and continuously improving it, public safety wide implementation of modern forms and working methods and advanced information technologies in the provision of services, minimizing the human factor in service activities by increasing the digitization of the public security system to 90%, preventing recidivism by persons under administrative control and probation control. reduction tasks are defined.

Also, in the “ROAD MAP” for the implementation of the strategy for the development of the public safety system in the Republic of Uzbekistan in 2022-2025, approved by this decree, to persons under preventive accounting, administrative control and probation control clearly defining the limits to be set, as well as the scope of the obligations imposed on them and the mechanisms for ensuring their compliance:

Ensuring, verifying and controlling the compliance of persons under preventive accounting, administrative control and probation control with the established

restrictions and fulfilling the obligations imposed on them, as well as applying educational and legal measures to these persons and their social adjustment development and implementation of the “Protocol of Actions” on;

On the basis of the institutions of administrative control and preventive accounting, the tasks of introducing the institution of preventive control are defined.

MUHOKAMA VA NATIJALAR

Ichki ishlar organlarining huquqbuzarliklar profilaktikasi bo‘linmalari tomonidan har chorak yakuni bo‘yicha surunkali alkogolizm, giyohvandlik va zaharvandlikka muhtalo bo‘lgan, tanosil kasalliklariga chalingan shaxslar hamda ruhiy kasallar ro‘yxatlari sog‘liqni saqlash muassasalaridan alohida so‘rov xati orqali rasman olib boriladi. Shaxsni profilaktik hisobga qo‘yish to‘g‘risidagi qarorda qarorni chiqargan profilaktika xizmati xodimining lavozimi, familiyasi, ismi, otasining ismi, qaror chiqarilgan sana va joyi, qaror qaysi shaxsga nisbatan chiqarilgan bo‘lsa, o‘sha shaxs to‘g‘risidagi ma‘lumotlar (familiyasi, ismi, otasining ismi, tug‘ilgan sanasi, yashash, ish, o‘qish joyi) va profilaktik hisobga qo‘yish asoslari ko‘rsatiladi.[6]

Shaxsni profilaktik hisobga qo‘yish to‘g‘risidagi qaror mazkur qarorni chiqargan profilaktika ishini olib borishga mas‘ul xodim tomonidan imzolanadi “Voyaga yetmaganlar o‘rtasida nazoratsizlik va huquqbuzarliklar profilaktikasi to‘g‘risida”gi Qonunga voyaga yetmaganlar orasida huquqbuzarliklar profilaktikasining turlarini ko‘rsatib o‘tish, shuningdek, ularning huquqbuzarliklardan jabrlanib qolishlarini oldini olish bo‘yicha viktimologik profilaktika chora-tadbirlarini ishlab chiqish lozim.

Bundan tashqari, 2017-yil 14-mart kunidagi O‘zbekiston Respublikasi Prezidentining Qarori bilan bo‘yicha tashkil etilgan “Huquqbuzarliklar profilaktikasi va jinoyatchilikka qarshi kurash bo‘yicha respublika idoralararo komissiyasi”ing asosiy vazifalari qatoriga quyidagi vazifani ham kiritish lozim bo‘ladi:

“huquqbuzarliklardan jabrlanuvchilarning hisobini yuritish tizimini tashkil etish, muvofiqlashtirish hamda jabrlanuvchilar va jabrlanish ehtimoli yuqori bo‘lgan shaxslar bilan olib boriladigan profilaktika ishlarini tashkillashtirish bo‘yicha axborot-tahliliy faoliyatni amalga oshirish”.

- huquqbuzarliklarning viktimologik profilaktikasini chora-tadbirlarini amaliyotda qo‘llash bo‘yicha vakolatli organlar tomonidan ichki normativ xujjatlarini ishlab chiqish;

- fuqarolarning turli ko‘rinishdagi huquqbuzarliklardan jabrlanishlariga qarshi OAVda ko‘rsatuvlar tashkil etish va unda aholining ishtirokini ta‘minlash orqali jamoatchilik fikrini o‘rganish;

- Internet tarmog‘ida fuqarolarning huquqbuzarliklardan jabrlanib qolishlarini oldini olishga qaratilgan ma‘lumotlar, ko‘rgazmali lavhalarni joylashtirish; - ijtimoiy tarmoqlarda yoshlar va voyaga yetmaganlarning turli ko‘ngilsiz hodisalarning qurboni bo‘lib qolayotganliklari, o‘z joniga qasd qilishga majbur bo‘lishlarini oldini olish

maqsadida huquqni muhofaza qiluvchi organlar hamda Axborot texnologiyalari va kommunikatsiyalarini rivojlantirish vazirligi bilan hamkorlikda ijtimoiy tarmoqlarda ularning jabrlanib qolishlariga qarshi qaratilgan ma’lumotlarni kiritib borish ishlarini amalga oshirish.[7]

XULOSA

Xulosa qilib shuni aytadigan bo’lsak amaldagi qilinadigan ishlar yuzasidan avvalam bor Inson huquqlari va erkinliklariga etibor berilishi lozim shaxsni huquq va erkinliklarini cheklanishini qadr qimmatini shani qonun bilan himoyalaniishi kerak.

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MAKTABDA ZAMONAVIY GEOGRAFIK MAYDONCHA

Sattorov Daler Alisher o'g'li

Namangan viloyati Chust tumani 4- maktab

Geografiya fani oqituvchisi

Annotatsiya: Maqolada Zamonaviy geografik maydoncha, uning geografiya fanini o'qitishda tutgan o'rni, maydonchada jolashtiriladigan o'quv jihozlari va ularning ahamiyati yoritilgan.

Kalit so'zlar: Zamonaviy geografik maydoncha, geografiya, Gorizontal quyosh soati, gnomon, gidrometeorologik stansiya, osadkomer, tog', vulqon.

KIRISH

So'nggi yillarda mamlakatimizda ta'lim tizimini jihatdan tubdan takomillashtirishga, o'sib kelayotgan yosh avlodni har tomonlama bilimli, teran fikrlaydigan, dunyoqarashi keng, ijodkor qilib tarbiyalashga ustuvor vazifa sifatida qaralmoqda. Zamon talabidan kelib chiqqan holda fanlarni o'qitishda, jumladan, geografiya darslarida o'quvchilarni kreativ fikrlashga undaydigan o'qitishning ilg'or usullaridan foydalanish muhim ahamiyatga ega. Shularni hisobga olgan holda, o'quvchilarning geografiya faniga bo'lgan qiziqishlarini oshirish, darslarni mazmunan boyitish hamda nazariy bilimlarini mustahkamlash dolzarb vazifalardan hisoblanadi. Mamlakatimizda ta'lim sifatini oshirish, ta'lim muassasalari moddiy-texnik bazasini mustahkamlash va ularni yuqori malakali mutaxassislar bilan ta'minlash borasida amalga oshirilayotgan keng qamrovli islohotlar natijasida har bar fan, xususan, geografiya fanini o'qitish jarayoniga zamonaviy usullar samarali tatbiq etilmoqda, talabalarning tabiiy-intellektual qobiliyatlarini rivojlantirishda integrativ ta'lim texnologiyalaridan foydalanish darajasi ortib bormoqda. Bu borada talabalarning geografik obyektlarga oid tasavvurini zamonaviy geografik maydonchada olib boriladigan dars mashg'ulotlari orqali rivojlantirish imkoniyatlarini kengaytirish, tabiiy geografik fanlarga oid o'quv materiallarini kuzatuv asosida jamlash muhim ahamiyat kasb etadi.

ADABIYOTLAR TAHLILI VA METODOLOGIYASI

Geografiya sohasidagi ilmiy tadqiqotlarni xorijlik olimlar olimlar N.N.Baranskiy, A.V.Darinskiy, V.A.Juchkevich, V.P.Maksakovskiy, A.V.Xutorskiylarning ilmiy ishlarida ko'rish mumkin. Mamlakatimizda geografiya darslarida didaktik va kartografik materiallar, ta'limning texnika vositalaridan foydalanish yo'nalishidagi ilmiy tadqiqotlar O.Mo'minov, T.Abdullayeva, M.Nabixonov, P.Musayev, H.Ubaydullayev, M.Yunusova, R.Qurbonniyozov, O'.Safarov, M.Abdurahmonov, R.Gaipova, S.Matsaidova, H.Nikadambayeva, F.Jumanova, F.Hamroyeva,

M.Qo'ldasheva kabi olimlar tomonidan olib borilgan. Respublikamizda geografiya fanini o'qitish masalalari bo'yicha ko'plab olimlar tomonidan ilmiy tadqiqotlar olib borilgan bo'lsa-da, aynan zamonaviy geografik maydonchalarda tashkil etilgan amaliy mashg'ulot va kuzatuv darslari samaradorligini o'rganish borasida ilmiy ishlar olib borilmagan.

NATIJALAR

Geografiya maydonchasi - zarur asboblardan bilan jihozlangan o'quvchilarning tabiatshunoslik va geografiyaga doir kuzatish ishlari olib borishi va mashg'ulotlar o'tkazishi uchun maxsus asbob- uskunalar bilan jihozlangan joy. Geografiya ta'limida talaba-yoshlarning egallagan nazariy bilimlarini amaliyotda qo'llay olish ko'nikma va malakalarini hamda kasbiy kompetensiyalarini rivojlantirishda "Zamonaviy geografiya maydoncha" sining ahamiyati beqiyos. "Zamonaviy geografik maydoncha" innovatsion xarakterga ega bo'lib, u tog' landshaftlari, daryo tizimi, vulqon, geyzerlar maketi, amaliy mashg'ulotlarni tashkil etish uchun "ochiq-o'quv auditoriya" ning mavjudligi va eng so'nggi geografik o'lchov asboblari bilan jihozlanganligi tufayli an'anaviy geografik maydonchalardan tubdan farq qiladi. Shuningdek, unda yerda gidrometeorologik stansiya, vaqtni aniqlash maydoni, turli tog' jinslari va tuproq namunalari uchun alohida burchak tashkil etiladi. "Zamonaviy geografiya maydoncha" da tabiat xodisalarini kuzatishdan olingan yangi ma'lumotlardan o'quv va ilmiy faoliyatda foydalaniladi.



1-rasm. Zamonaviy geografik maydoncha

Zamonaviy geografiya maydonchasidagi amaliy ishlar geografiya darslarida va sinfdan tashqari vaqtlarda muntazam otkazib turiladi. Astronomik va meteorologik kuzatishlar munosabati bilan bolalar asboblardan foydalanishni, ularning ko'rsatkichlarini muntazam yozib borishni o'rganadilar. Zamonaviy geografik maydonchasida yer yuzasi modellari - globus, hovuzlar, to'g'onlar, sug'orish kanallari va tog'larni ko'radilar.



Geografiya maydonchasi ochiq joyda amaliy ishlar olib borishga mojlab jihozlanagan joydir. Geografiya maydonchasini "Tabiat laboratoriyasi" deyish mumkin, chunki "Tabiat laboratoriyasi" da o'tkazilgan mashg'ulotlar o'quvchilar bilimni puxta bolishini taminlaydi, turli asoslar bilan ishlashga doir konikmalarni hosil bolishiga yordam beradi. Oquvchilar geografiya maydonchasida tabiat hodisalarini kuzatishga, ijtimoiy foydali mehnat qilishga o'rganadilar.

Geografiya maydonchasi iloji boricha ochiqroq joyda tashkil etilishi lozim. Bu ko'z bilan chamalab plan olish, quyoshning chiqishi va botishini, uning gorizontdan balandligini yil o'zgarishini kuzatishga aniqlashga imkon beradi. Geografiya maydonchasining maktab tajriba uchastkasi yonida bolishi maqsadga muvofiq. Chunki bu fenologik hodisalarni tushuntirish, qishloq xo'jalik ekinlarini rivojlanishini iqlimga bogliq ekanliklarini oz ko'zlari bilan ko'rib, bilib olishga imkon beradi.

MUHOKAMA

Geografiya maydonchasining kattaligi 25x20 m, 20x15 m, 20x10 m, 10x10 m bo'lishi mumkin. "Zamonaviy geografik maydoncha" hududida quyidagi o'quv jihozlari joylashtiriladi: Vaqtni aniqlash maydoni - bu yerda gorizont va ekvatorial quyosh soatlari, Gnomon hamda Soat modeli kabi vaqtni aniqlovchi uskunalar joylashtirilgan.

Gorizont quyosh soati - vaqtni aniqlaydigan asbob. Quyosh soati markaziga joyning geografik kengligiga teng burchak ostida plastina va siferblat o'rnatilgan taxtachadan iborat. Quyosh soati o'qi Yer o'qiga parallel qilib o'rnatiladi. Bu soatdan yil davomida havo ochiq kunlari foydalanish mumkin.

Ekvatorial quyosh soati - Ekvatorial Quyosh soatida siferblat tekisligi ekvator tekisligiga parallel qilib o'rnatiladi. Soat sterjeni Olam o'qi yo'nalishida, sondan yozilgan tekislikda 12 soni ko'rsatilgan nuqta shimol yo'nalishini ko'rsat ish holatida o'rnatiladi. Bu soatning kamchiligi quyosh ekvator tekisligidan pastda harakatlengandan (kuzgi teng kunlikdan bahorgi teng kunlikgacha) sterjenning soyasi aniq vaqtni ko'rsatmaydi.

Gnomon - astronomik asbob, u Quyoshning burchak balandligini uning soyasining eng kichik uzunligi (peshin vaqti)dan aniqlashga imkon beradi. Gnomon

soyasining uzunligi va yo'nalishiga qarab Quyoshning gorizontdan balandligini va azimutini aniqlash mumkin. Qisqa soyaning o'zi ham haqiqiy meridianning yo'nalishini ko'rsatadi. Gnomonni sundialning bir qismi deb ham atashadi, unga ko'ra sundialdagi vaqt aniqlanadi. Sundial - bu quyoshning osmonda ko'rinadigan pozitsiyasi bo'yicha quyosh nuri bo'lgan kunning vaqtini bildiradigan asbob.

Soat modeli - Yer yuzasiga parallel holda o'rnatilgan va soat vaqti tasvirlangan taxtacha hamda harakatlanadigan o'qdan iborat. Strelkasi Quyosh harakatiga qarab to'g'rilanganda vaqtni aniq ko'rsatadigan asbob.

Gidrometeorologik stansiya - zamonaviy geografiya maydonchani asosiy qismi bo'lib, bu yerda ob-havoning o'zgarishi Meteorologik budka, Osadkomer (yog'in o'lchagich) va Nefoskop halqasi yordamida kuzatib boriladi.

Meteorologik budka - maxsus konstruksiyaga ega bo'lgan qurilma, devorlari yog'och panjaradan ishlangan va yer yuzasidan 2 metr balandlikda o'rnatilgan. Uning tomi 2 qavatdan iborat. Budkaning devorlari qalinligi 6 mm va eni 35 mm li yog'och taxtalardan yasalgan. Budkaning ichiga quyosh nurlari tushmasligi uchun taxtalar devorga 450 burchak bilan qiya qilib o'rnatilgan, ular orasida shamol bemalol o'ta oladi. Budka quyosh nuri ta'sirida qizib ketmasligi uchun oq rangga bo'yalgan. Uning ichiga Urganch davlat universiteti bilan hamkorlikda Germaniyadan keltirilgan Micro Climat Station HOBOW uskunasi o'rnatilgan.

Osadkomer - yog'inlar miqdorini o'lchash uchun xizmat qiladigan asbob. U 2 dona paqircha, metall plastinkalardan tuzilgan to'siq va o'lchov stakanidan iborat. Paqirchani yuqori qirrasini yer yuzasiga nisbatan 2 metr balandlikda o'rnatilgan. Paqirchada jo'mrak va varonka mavjud. Varonka yozda paqirchadagi suvni bug'lanishini kamaytirish vazifasini bajaradi. Yog'in miqdorini o'lchashda paqirchadagi suv o'lchov stakaniga quyiladi. O'lchov stakani 100 bo'lakli shkalaga bo'lingan. O'lchov stakani bo'yicha aniqlangan yog'in miqdoriga bug'lanish hamda idish devorlarini namlashi evaziga 0,2 mm miqdorida qo'shimcha qo'shiladi. Qor yoqqanida paqircha o'lchashga olinib uning o'rniga ikkinchi paqircha qo'yiladi. Qorli paqircha xonaga olib kirilib, erigan qor suvi o'lchanadi.

Nefoskop - qutb tomonlari ko'rsatilgan ko'zgu orqali bulutlik miqdori va bulutlarning yo'nalishini aniqlashda foydalaniladigan asbob.

Tog' maketi. Tog'lar geografiya fanining asosiy tadqiqot ob'ektlaridan biridir. Mazkur tog' maketi talabalarga tog' tizimi, tog' tizmasi, tog' massivi, tog' zanjiri, tog' tuguni, tog' vodiylari, tog' oraliq botiqlari, yonbag'ir, tog' etagi, cho'qqi, tog' qirrasini, dovon, tog' yo'laklari kabi tushunchalarni amalda ko'rsatib tushuntirish uchun yasalgan. Shuningdek, tog' maketi orqali daryo hazasi va irmoqlari, balandlik mintaqalari hamda tog' tabiatidan foydalanishning o'ziga xos jihatlari tushuntiriladi.

Vulqon maketi. Endogen jarayonlar ichida bevosita kuzatish mumkin bo'lgan hodisa bu vulqon otilishidir. Vulqon Yuqori Mantiya va Astenosfera qatlamlaridan

magmaning Yer yuzasiga otilib chiqib, atmosfera va yer yuzasini turli xil gazlar, suv bug'lari, kul, tosh, qum va lava qoplamlari bilan qoplashidir. Vulqonlarning o'z konusi, krateri, chiqish joyi kabi qismlari mavjud. Vulqonlar faol yoki nafaoligiga ko'ra harakatdagi, uyqudagi va tinchigan turlarga bo'linadi. Yer sharidagi vulqonlarning 60 foizi Tinch okean olovli halqasida joylashgan. Ushbu vulqon maketi talabalarga endogen jarayonlar, xususan vulqonlar to'g'risida bilimlarni mustahkamlashda foydalaniladi.

Geyzer - vulqonlar vujudga keluvchi o'choqqa yaqin yerlardan chiqayotgan, harorati 100 gradus va undan ortiq bo'lgan suvlar. Bunday yer osti suvlari sayyoramizning tektonik jihatdan yosh, harakatchan hududlarida, chunonchi, Tinch okean olovli halqasi va Islandiya orolida keng tarqalgan. Ma'lumotlarga ko'ra Yer sharidagi vulqonlarning yarmidan ko'pi dunyo okeani tubida joylashgan. Mazkur geyzer maketi geyzerlar to'g'risida ma'lumotlarni talabalarga yetkazishda foydalaniladi.

Ochiq auditoriya - tabiatni kuzatishdan olingan ma'lumotlarni tahlil qilish va qayta ishlash hamda amaliy va kuzatuv mashg'ulotlarini olib borishga mo'ljallangan o'quv laboratoriyasi.

XULOSA

Zamonaviy geografiya maydonchalarida tajriba darslarini o'qitish hozirgi kunda dolzarbligi va samaradorligi bilan geografiya fanida katta ahamiyat kasb etadi. Ze'ro, inson o'zining yashab turgan joyi, uning tabiati, undagi o'zgarishlarning mohiyatini vujudga kelishi va qonuniyatlarini bilmayturib boshqa bilimlarni egallay olmaydi. Geografiya fanlarini o'rganishda zamonaviy geografiya maydonchasi o'tkazilgan amaliy mashg'ulotlar va kuzatuv darslari o'quvchilarda tabiatdagi hodisalar to'g'risida dastlabki tasavvurlarni hosil qilishga imkon beradi. Geografiya maydonchasidagi kuzatishlar kuzatuvchilardan ancha uzoq masofada bo'lgan tabiat obyektlari haqida tushunchalar to'g'risida puxta bilim egallashga ko'mak beradi. Xulosa qilib shuni aytishim mumkinki, zamonaviy geografiya maydonchasi o'quvchilarni mukammal bilim olishga, ularda fanga bo'lgan qiziqishni orttirishga xizmat qiladi. O'quvchi faqat darsxonalaridagina bilim olib qolmasdan balki, mustaqil ravishda bilim to'plash, izlanish va taqqoslabtahlil qilish ko'nikmalariga ega bo'ladi.

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IMAGE-TO-VIDEO CONVERSION: BRIDGING STATIC VISUALS TO DYNAMIC NARRATIVES

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Abstract: Image-to-video conversion is a transformative process that translates a sequence of still images into a dynamic and cohesive video format. It involves organizing, sequencing, and enhancing individual images with transitions and audio elements to create engaging visual narratives. This technology's versatility finds applications across marketing, digital content creation, education, and entertainment, offering a creative means to transform static visuals into compelling video presentations. As technology advances, automated tools and AI-driven algorithms continue to refine and streamline this conversion process, enabling efficient and captivating video creation from static imagery.

Keywords: image-to-video, multimedia transformation, visual narratives, video synthesis, transition effects, audio integration, frame rate, resolution consistency, aspect ratio, digital storytelling, content creation, automation, AI algorithms, machine learning, marketing videos, educational videos, entertainment content, multimedia technology, creative transformation, visual communication

Certainly! Image-to-video technology involves the transformation of a sequence of images or a collection of individual images into a video format. This process usually includes various steps to assemble the images, determine their sequence, and create a coherent video presentation. Here's an overview of how image-to-video conversion typically works:

1. **Image Compilation:** The process begins with gathering a set of images that are intended to be part of the video. These images can be photographs, graphics, or frames extracted from videos.

2. **Sequence Arrangement:** The images are organized in a specific order or sequence based on the desired flow or narrative of the video. The sequence might be predefined or determined during the video creation process.

3. **Transition Effects:** Transitions, such as fades, dissolves, wipes, or other visual effects, might be added between the images to create smooth transitions from one image to another. These effects help enhance the visual appeal and continuity of the video.

4. Audio Incorporation: Audio elements, including background music, voiceovers, or sound effects, can be added to accompany the visual sequence. These audio elements contribute to the overall storytelling and engagement of the video.

5. Video Generation: Using video editing software or specialized tools, the images, transitions, and audio components are combined and processed to generate a video file. The output video file typically comprises a sequence of images playing in succession with the added effects and audio.

Image-to-video technology finds applications in various domains:

- Slideshows and Presentations: It's commonly used to convert a series of images into video presentations or slideshows for educational or business purposes.

- Marketing and Advertising: Marketers utilize image-to-video conversion to create promotional content or advertisements by amalgamating images into engaging videos.

- Social Media and Content Creation: Content creators leverage this technology to produce captivating visual content for platforms like YouTube, Instagram, or TikTok.

- Digital Storytelling: Image sequences can be converted into narrative-driven videos for storytelling purposes, such as documentaries, short films, or visual storytelling projects.

Tools and software used for image-to-video conversion vary and can include video editing software like Adobe Premiere Pro, Final Cut Pro, online platforms like Canva, or specialized image-to-video conversion software.

Image-to-video technology provides a convenient way to transform static images into dynamic visual presentations, enhancing the impact and appeal of the content across various mediums and applications.

Image-to-video technology involves the conversion of a series of still images into a continuous video format. Here are some additional details and aspects related to image-to-video conversion:

Frame Rate and Duration: When converting images to video, setting the frame rate (the number of frames per second) and determining the duration each image appears on-screen significantly impacts the video's flow and visual experience. Higher frame rates often result in smoother videos.

Resolution and Aspect Ratio: Ensuring consistency in resolution and aspect ratio among the images is crucial. The video's resolution and aspect ratio are often standardized for uniformity and compatibility across different platforms and devices.

Effects and Transitions: Adding visual effects, transitions, and animations between images can enhance the storytelling or aesthetic appeal of the video. Popular transition effects include fades, slides, zooms, and rotations, among others.

Audio Integration: Incorporating audio elements, such as background music, voiceovers, or sound effects, can significantly impact the video's mood, engagement,

and storytelling. Syncing audio with the visual sequence is essential for a coherent presentation.

Automated Tools and Software: Various software tools, both online and offline, offer automated image-to-video conversion capabilities. These tools often provide templates, customizable options, and simplified workflows for users to create videos from their image collections easily.

Personalization and Customization: Users can personalize their image-to-video projects by adding text overlays, captions, logos, or graphical elements to align the video with specific branding or messaging requirements.

Applications in AI and Machine Learning: Image-to-video conversion can be part of AI and machine learning applications, where algorithms generate videos from image datasets for tasks like video synthesis, analysis, or training visual recognition models.

Dynamic Content Creation: Beyond static images, dynamic content like GIFs or cinemagraphs (images with subtle motion) can also be utilized in image-to-video conversion to create visually engaging and unique content.

Storyboarding and Visualization: Before the conversion process, creating a storyboard or visual plan can help arrange images in a sequential order that aligns with the intended narrative or storytelling structure of the video.

Use Cases: Image-to-video technology is widely used in various fields, including education, entertainment, digital marketing, social media, presentations, e-learning modules, and more.

Image-to-video conversion offers a flexible and creative way to transform static images into dynamic and engaging visual content, catering to diverse needs across multiple industries and purposes.

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UMUMIY O’RTA TA’LIM MUASSASALARIDA O’QUVCHILAR OVQATLANISHINI GIGIYENIK TASHKILLASHTIRISH

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ANNOTATSIYA

Bugungi kunda ko'plab kasalliklarning oldini olish, aholi salomatligini saqlash va mustahkamlashning eng muhim shartlaridan biri bo'lgan sog'lom turmush tarzi tamoyillariga asoslanadi. Shu bilan birga, asosiy vazifalardan biri parhez ovqatlanish va ozuqa moddalar tarkibini optimallashtirish, aholi guruhlari va avvalambor, bolalar va o'smirlarning sog'lig'ini saqlash va yaxshilashdir. Ishning maqsadi umumiy o'rta ta'lim muassasalari o'quvchilarini sog'lom ovqatlanishini gigiyenik baholash va ularni optimallashtirish bo'yicha tavsiyalarni ilmiy asoslashdir. Aniqlanishicha, ovqatlanishda sanitariya qoida va me'yorlar bo'yicha bilimlarning yetarli emasligi bolalar va o'smirlarning ovqatlanishini tashkil etishdagi mavjud kamchiliklar, shuningdek iqtisodiy omillar tufayli ovqatlanish holatining yetarli emasligiga olib keladi.

Kalit so'zlar: ozuqa moddalar, bolalar, o'smirlar, maktablar, sanitariya qoida va me'yor.

ABSTRACT

Today, the prevention of many diseases is based on the principles of a healthy lifestyle, which is one of the most important conditions for maintaining and strengthening the health of the population. At the same time, one of the main tasks is to optimize dietary nutrition and nutrient composition, maintain and improve the health of population groups, and above all, children and adolescents. The purpose of the work is to scientifically base the recommendations on the hygienic assessment of the healthy diet of students of general secondary educational institutions and their optimization. It was found that the lack of knowledge about sanitary rules and norms in nutrition, existing shortcomings in the organization of nutrition of children and adolescents, as well as economic factors lead to insufficient nutritional status.

Keywords: nutrients, children, teens, schools, sanitary rules and norms.

Muammoning dolzarbligi. O‘zbekiston Respublikasi Sog‘liqni Saqlash Vazirligi Sanitariya epidemiologik osoyishtalik va jamoat salomatligi qo‘mitasi tomonidan ishlab chiqilgan № 0017-21 sonli sanitariya qoida va me‘yorlarida umumiy o‘rta, o‘rta maxsus, professional ta‘lim muassasalarida o‘quvchilar ovqatlanishini tashkil etishning sanitariya qoidalari haqida to‘liqligicha ma‘lumotlar keltirilgan. Ushbu sanitariya qoida va me‘yorlari faoliyat olib borayotgan, qurilayotgan va qayta ta‘mirlanayotgan ta‘lim muassasalaridagi umumiy ovqatlanish muassasasiga tadbiiq etiladi. Ta‘lim muassasalarida o‘quvchilarning to‘g‘ri ovqatlanishini tashkil etishda, oshxonalarini tashkil etishni rejalashtirtish, oziq – ovqat maxsulotlarini xavfsiz tayyorlanishi, ozuqaviy qiymatining saqlanishi, sanitariya qoidalari asosida tarqatilishi, maxsulotlarga ishlov berish xonalari, texnologiya, uskuna va jixozlar ko‘zda tutiladi.

O‘rta umumta‘lim muassasalarida umumiy ovqatlanishni gigiyenik tashkil etish avvalambor xomashyo, tayyor va yarimtayyor maxsulotlarni, tozza va ishlatilgan idishlarni, oshxona xodimlari va xo‘randalar oqimining bir – biriga to‘qnash kelishining oldini olishga qaratilgan sanitariya qoida va me‘yorlariga javob berishi kerak. Har o‘quv yili boshlanishidan oldin uskunalarining ishchi xolatda ekanligi texnik nazorat o‘tkazilishi kerak.

Ovqatlanish zallari oshxona mebellari (stol, stul, o‘rindiqliq va boshqa mebellar) bilan jihozlanadi, ular yuvish va dezinfeksiya vositalari bilan tozalashga imkon berish bilan birgalikda, dezinfeksiya ishlari olib borilganda oshxona mebellari tashqi ko‘rinishini saqlovchi qoplamaga ega bo‘lishi kerak.

Oziq-ovqat xomashyo va mahsulotlariga ishlov berishga mo‘ljallangan stollar yuvish va dezinfeksiya qilish vositalariga chidamli qoplamaga ega bo‘lishi hamda oziq-ovqat mahsulotlarini saqlash uchun mo‘ljallangan materiallar tarkibi bilan maxsulotlarga zarar yetkazish xavfi bo‘lmasligi kerak.

Oziq-ovqat xomashyo va mahsulotlari, idish-tovoqliq hamda inventarlar saqlanadigan javon, tagliklar poldan kamida 15 sm balandlikda joylashga bo‘lib, javon va tagliklar konstruksiyasi va joylashtirilishi namlab tozalash imkonini berishi lozim.

Ovqatlanishni tashkil etishda oziq-ovqat mahsulotlarini saqlash uchun mo‘ljallangan hamda xavfsizlik talablariga javob beradigan chinni, shisha idishlardan (tarelka, kosa, piyola, chashka, bokallar) foydalaniladi. Taomlarni pishirish va saqlash uchun oshxona uskunalarini idishlari (qoshiqliq, vilka, pichoqliq) zanglamaydigan po‘lat yoki gigiyenik xususiyatlariga ko‘ra shunga o‘xshash materiallardan tayyorlangan bo‘lishi kerak. Alyuminiydan tayyorlangan oshxona jihozlaridan foydalanishga ruxsat etilmaydi.

Oziq-ovqat mahsulotlarini saqlash uchun mo‘ljallangan hamda xavfsizlik talablariga javob beradigan, issiqliq, sovuqliq ovqat va ichimliklar uchun foydalanishga

ruxsat berilgan bir martalik oshxona uskunalari va idish-tovoqlardan foydalaniladi. Bir martalik idishlardan qayta foydalanilmaydi.

Xomashyo va tayyor mahsulotlarni alohida saqlash, ularni texnologik tozalash va tarqatish uchun majburiy tartibda alohida va maxsus belgi qo'yilgan jihozlardan, taqsimlash inventarlari, oshxona idishlaridan foydalaniladi.

Sovutgich va muzlatgichlar mahsus belgi (markirovka) bilan belgilanadi: “XG” - xom go'sht; “XS” - xom sabzavotlar, “PG” - pishgan go'sht, “PS” - pishgan sabzavotlar va boshqalar. Oziq-ovqat xomashyo va mahsulotlariga ishlov berishga mo'ljallangan stollari: “XG” - xom go'sht; “XS” - xom sabzavotlar, “PG” - pishgan go'sht, “PS” - pishgan sabzavotlar, “N” - non, “X” – xamir. Bundan tashqari oziq-ovqat xomashyo va mahsulotlariga ishlov berishga mo'ljallangan taxta va pichoqlar mahsus belgi (markirovka) bilan belgilanadi: “XG” - xom go'sht, “XS” - xom sabzavotlar “PG” - pishgan go'sht, “PS” - pishgan sabzavotlar, “N” – non va oshxona anjomlari (qozonlar, tavalar, chelaklar) mahsus belgi (markirovka) bilan belgilanadi: “I taom”, “II taom”, “III taom”, “sut”, “XG”, “XS”, “PG”, “PS”, “yorma”, “shakar”, “tvorog”, “mevalar”, “toza tuxum”, “garnirlar”, “N”, “Z”, “Salat” shu kabilardan iborat bo'lishi kerak.

Taomlarni porsiyalash uchun litr va millilitrda o'lchov belgilari qo'yilgan inventarlardan foydalaniladi.

Shakli buzilgan, chetlari uchgan, singan, yoriq, emali ko'chgan oshxona idishlari, alyuminiydan tayyorlangan oshxona jihozlari, plastmassa va presslangan fanerlardan qilingan ishlov berish taxtalari, yorilgan, shikastlangan va mayda taxta jihozlaridan foydalanishga yo'l qo'yilmaydi.

Issiq ovqat va salqin salatlarni yetkazib berishda oziq-ovqat mahsulotlarini saqlash uchun mo'ljallangan hamda xavfsizlik talablariga javob beradigan materiallardan tayyorlangan maxsus izotermik idishlardan foydalaniladi.

Mahsulotlar saqlanadigan omborxonalar nisbiy namlik va havo haroratini o'lchaydigan uskunalar “psixrometrlar”, sovutgich va muzlatgichlar nazorat spirtli termometrlari bilan jihozlanadi.

Xonalarning tuzilishiga, idish-tovoqlarning yuvilishiga qo'yiladigan sanitariya talablar ham mavjud.

Ta'lim muassasalari umumiy ovqatlanish, ishlab chiqarish va boshqa xonalari toza va tartibli bo'lishi lozim. Oziq-ovqat mahsulotlarini polda saqlashga yo'l qo'yilmaydi.

Ovqatlanish zalini tozalash ishlari har taom tortilib o'quvchilar ovqatlanib chiqib ketgandan so'ng bajariladi. Stollar yuvish vositalari yordamida issiq suvda yuviladi. Tozalash tugagandan so'ng ishlatilgan lattalar aloxida idishga yig'iladi, kamida 45°C haroratdagi yuvuvchi vositalar qo'shilgan suvda ivitiladi, dezinfeksiya qilinadi yoki qaynatiladi, chayiladi, quritiladi va toza lattaga mo'ljallangan idishda aloxida joyda

saqlanadi. Oshxona ichida ishlatiladigan idishlarni taom iste'mol qilishda foydalaniladigan idishlardan alohida yuviladi.

Oshxona idishlarini ikki seksiyali vannada yuvishda quyidagi tartibga rioya qilinadi:

1. ovqat qoldiqlaridan mexanik tozalash;

2. yuvish vositalari qo'shilgan holda 45⁰C dan past bo'lmagan haroratdagi suvda cho'tka bilan yuvish;

oqib turgan 65⁰C dan past bo'lmagan haroratdagi issiq suvda chayish;

panjarali polka va quritgichlarda to'ntarilgan holda quritish.

Oshxona idishlari maxsus idish yuvish mashinalarida yuvilganda, ulardan foydalanish yo'riqnomasiga asoslaniladi.

Taomlarni iste'mol qilishda foydalanilgan idishlar uch seksiyali vannada qo'lda quyidagi tartibga yuviladi:

1. ovqat qoldiqlaridan mexanik tozalash;

2. vannaning birinchi seksiyasida 45⁰ C dan past bo'lmagan haroratda yuvish vositalari qo'shilgan suvda yog'sizlantirib yuvish;

3. epidemik vaziyatdan kelib chiqib, kasallikning turiga muvofiq vannaning ikkinchi seksiyasida harorati 45⁰ C dan past bo'lmagan suvda, 0,5-1,0% xlor saqlovchi zararsizlantirish vositasi qo'shilgan suvda 30 daqiqa ivitish;

Idishlarni vannaning uchinchi seksiyasida metall setkaga qo'yilib, egiluvchan shlangning ruchkali purkagichi yordamida 65⁰ C dan past bo'lmagan haroratdagi oqar suvda chayish, chayilgan idishlarni panjarali polka va quritgichlarda quritish.

Piyola, stakan, chashka, bokallar kabi ichimlik idishlari ularni yuvish uchun mo'ljallangan birinchi vannada tozalash vositalarini qo'llagan holda 45⁰ C dan past bo'lmagan haroratdagi suvda yuviladi; ikkinchi vannada metall setkaga qo'yilib, egiluvchan shlangning ruchkali purkagichi yordamida 65⁰ C dan past bo'lmagan haroratdagi oqar suvda chayish; epidemik vaziyat murakkablashgan xolatda esa, idishlarni zararsizlantirish ishlari ham o'tkaziladi.

Oshxona jihozlari yuvish vositalarini qo'llagan holda 45⁰Sdan kam bo'lmagan haroratdagi issiq suvda yuvilib, oqar suvda chayiladi va maxsus issiq shkafda 10 daqiqa davomida qizdirilib, zararsizlantiriladi. Oshxona jihozlarini saqlash kassetalari har kuni tozalash vositalarini qo'llagan holda tozalanib, chayiladi va maxsus shkafda issiq havo yordamida 10 daqiqa davomida qizdirilib, zararsizlantiriladi.

Toza oshxona idishlari va jihozlari poldan kamida 0,5 m balandlikdagi shkaf yoki panjaralarda saqlanadi, oshxona jihozlari (qoshiq, vilkalar) ushlagichlari yuqoriga qaratilgan holda maxsus idishlarda saqlanadi, ularni sochilgan holda patnislarda saqlanishiga yo'l qo'yilmaydi.

XULOSA.

Respublikamizda maktab o'quvchilarini tekin ovqat bilan ta'minlash bo'yicha ishlar ilgari surilayotgan paytda ushbu sanitariya qoida va me'yorlariga rioya qilgan xolda imkon qadar tashkil etilsa sog'lom ovqatlanish bilan birgalikda bolalar orasida yuqumli kasallanishlarning oldini olishqa katta qadam tashlanadi.

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**AKADEMIK LITSEYLARDA FIZIKA FANIDAN INNOVATSION
TEKNOLOGIYALARDAN FOYDALANGAN HOLATDA DARS O‘TISH**

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Annotatsiya. Mazkur maqolada fizika fanini o‘qitishda innovatsion texnologiyalarning o‘rni haqida so‘z boradi. Muallif pedagogik ma’lumotlarga tayanib, mavjud ilmiy adabiyotlar asosida muammoni tahlil qilgan va fizika fanini o‘qitishda innovatsion texnologiyalarning o‘rni bo‘yicha mavjud o‘ziga xos jihatlarni o‘rgangan.

Kalit so‘zlar: texnologiya, innovatsiya, fizika, pedagogik texnologiyalar.

KIRISH

Fizika fani bizni atrofimizdagi dunyoni, nafaqat dunyoni, boringki butun texnologiyani qanday ishlashini tushunishga yordam beradi. Shuningdek, Fizika bizga koinotni tartibga solishga yordam beradi. U asoslar bilan shug‘ullanadi va bir -biriga o‘xshamaydigan hodisalar o‘rtasidagi bog‘liqlikni ko‘rishga yordam beradi. Fizika bizgajodkorlikni ifoda etishga, dunyoni yangicha ko‘rishga va keyin uni o‘zgartirishga yordamberadigan kuchli yo‘nalishlar beradi. Fizika ma’lumotni tahlil qilish va fan, muhandislik va tibbiyot, shuningdek iqtisod, moliya, menejment, huquq va davlat siyosatidagi muammolarni hal qilish uchun zarur bo‘lgan miqdoriy va analitik ko‘nikmalarni beradi. Fizika eng zamonaviy texnologiyalarning asosi bo‘lib, ilmiy, muhandislik va tibbiy tadqiqotlar va ishlanmalarda ishlatiladigan asboblardan foydalanish uchun asosdir. Ishlab chiqarishda fizikaga asoslangan texnologiyalarustunlik qiladi.

TADQIQOT METODOLOGIYASI VA EMPIRIK TAHLIL

Malakali fizika o‘qituvchilari bo‘lmagan litseylar o‘z o‘quvchilarini kelajakda ular erishishi mumkin bo‘lgan hurmatli va yaxshi maosh oladigan kasblardan uzib qo‘yadi. Fizikani o‘qiyotgan talabalar SAT, MCAT va GRE testlarini yaxshiroq bajaradilar. Fizika mutaxassisliklari MCAT -da bio yoki kimyo fanlariga qaraganda yaxshiroq ishlaydi. Chunki, ushbu elektron vositalarni ta’lim muassasalarida fanni o‘qitishdafizik jarayonlarni, elektron darsliklar, animatsiyalar, virtual laboratoriya va tajribalarni tinglovchilarga dars davomida ko‘rsatib borilmoqda. Jumladan, Favqulodda vaziyatlar vazirligi Akademiyasida ham ta’lim jarayonida mavjud barcha fanlarning, ma’ruza laboratoriya va amaliy mashg‘ulotlarida yangi zamonaviy texnologiyalar va asbobuskunalar ya’ni, raqamli o‘lchash asboblari, vertual laboratoriyalar, animatsiyalar, elektron darsliklar, hamda ular asosidagi multimediyaviy vositalardan foydalanish keng yo‘lga qo‘yilgan va undan tashqari veb- saytlarning samarali tashkil

qilinishi, ta’lim-tarbiya samaradorligini oshirishda ham litseyda o’tkazilayotgan turli xil ilmiy-amaliy, ma’naviy-ma’rifiy anjumanlarning ahamiyati katta bo’lmoqda.

Fizika bo’yicha mutaxassislik nafaqat fizika, balki barcha muhandislik va axborot/informatika fanlari bo’yicha aspiranturaga mukammal tayyorgarlikni ta’minlaydi; hayot fanlari, shu jumladan molekular biologiya, genetika va neyrobiologiya; yer, atmosfera; iqtisod va moliya; va davlat siyosati va jurnalistikada asqatadigan sohadir. Siz fizikasiz muhandis yoki shifokor bo’lmaysiz; o’qituvchilik bilan shug’ullanish ehtimoli kamroq; sizning video o’yinlaringiz zerikarli bo’ladi va animatsion filmlaringiz haqiqiy ko’rinmaydi; Sizning global isish haqidagi siyosat qarorlaringiz unchalik ahamiyatli bo’lmaydi. Fiziklar uchun maxsus so’raladigan ish e’lonlari soni, masalan, muhandislarnikidan kichikroq bo’lsa-da, fizika bo’yicha malakaga ega bo’lganlar uchun mehnat bozori har xil va har doim kuchli. Fizika miqdoriy, tahliliy tafakkurni rivojlantirganligi sababli, fiziklar boshqa texnik mutaxassislarga qaraganda yuqori boshqaruv va siyosat lavozimlarida bo’lish ehtimoli ko’proq faoliyat yuritishadi. AQSh hukumatidagi ilm -fan bilan bog’liq uchta yuqori lavozimdan ikkitasi - energiya vaziri va Oq uyning fan va texnologiya siyosati idorasi direktori - hozirda fiziklardir. Hammamiz, shu jumladan professional fiziklar, - o’rta maxsus ta’lim tizmidagi fizika kurslarini qiyin deb bilamiz, chunki ular bizdan ko’plab kasblar bo’yicha fizika bo’yicha o’qitishni qimmatli qiladigan ko’plab tushunchalar va ko’nikmalarni o’zlashtirishni talab qiladi. Bu shuni anglatadiki, tarixyoki psixologiya yoki kompyuter dasturlash kabi boshqa fanlarga qaraganda, fizikani kollejdandan keyin (mustaqil yoki ish joyida) o’rganish ancha qiyin.

Bugungi kun fizika o’qituvchisi oldida turgan dolzarb muammolardan biri ta’limning zamonaviy texnologiyalarini loyihalash va uni o’qitish amaliyotida qo’llashdir. Fizika o’qituvchisi o’quvchilarga fizika fanidan zaruriy bilimlarni beribgina qolmay, ularda fanga nisbatan qiziqish uyg’ota olishlari kerakki, natijada bu sohada yaxshi mutaxassis, yetuk kadrlar yetishib chiqishiga erishilsin. O’qituvchi o’tgan har bir dars boshqa darsdan farq qilishi, bugungi o’tiladigan dars kechagisiga nisbatan mukammal bo’lishi kerak. Darsni yangi pedagogik texnologiyalar:

- axborot vositalaridan foydalanib;

- ko’rgazmali qurollari yordamida;

- interfaol metodlarni qo’llash orqali; va h.k.lardan foydalanib tashkil etsak, bu dars o’quvchi ongiga yaxshi yetib boradi va xotirasidan joy oladi. O’quvchining ilmiy dunyoqarashi kengayib, bilim darajasi ortadi. An’anaviy ta’limdan farqli zamonaviy ta’limni tashkil etishdan maqsad ortiqcha ruhiy va jismoniy kuch sarf etmay, qisqa vaqt ichida yuksak natijalarga erishishdir. Qisqa vaqt ichida muayyan nazariy bilimlarni o’quvchilarga yetkazib berish, ularda ma’lum faoliyat yuzasidan ko’nikma va malakalarni hosil qilish, shuningdek o’quvchilar faoliyati, bilimni nazorat qilish,

ularning bilim, ko‘nikma va malakalarini baholash fizika fani o‘qituvchisidan katta pedagogik mahorat hamda ta‘lim jarayoniga yangicha yondashishni talab etadi.

Ta‘lim tizimida multimediali elektron o‘quv adabiyotlar, ma‘ruzalar virtual laboratoriya ishlari, har hil animatsion dasturlar slaydlar yaratishda kerak bo‘ladigan maxsus dasturlar hisoblanadi. Ta‘lim tizimida yuqorida keltirilgan dasturlarda tayyor modellar mavjud bo‘lib bunda foydalanuvchi boshlang‘ich parametrlarni kiritib bir necha turkum ishlarni (laboratoriya, yong‘in xavfsizligi masalalarini tahlil qilishda, taqdimot ma‘ruzalarida animatsiyalar) dan keng foydalanishi mumkin. Fizik jarayonlarni modellashtirish imkoniyatini beradigan dasturlariga: MatCad, MatLab, Maple, Crocodile, Physics, Electronics Workbench va boshqa dastur paketlarini misol keltirish mumkin. Axborot texnologiyalarning imkoniyatidan foydalangan holda kompyuter modellarini o‘quv jarayonlarida foydalanish o‘zining samarasini beradi.

XULOSA VA MUNOZARA

Bugungi kunda ta‘lim modernizatsiya jarayonlarini boshdan kechirmoqda. Ta‘lim sohasidagi davlat siyosatining asosiy prinsiplaridan biri bu "ommaviy foydalanish imkoniyati, ta‘lim tizimining ta‘lim tizimiga moslashuvchanlik, talabalarni tarbiyalash va o‘qitish xususiyatlari." Xulosa qilib shuni aytish mumkinki, yuqorida keltirilgan dasturlardan ma‘ruza jarayonida qo‘llash natijasida qisqa vaqt ichida kerakli axborotni tinglovchi va o‘quvchilarga ko‘rgazmali o‘tkazish imkoniyati bor. Bu esa o‘quv samaradorligini oshirishning muhim omili bo‘lib xizmat qiladi.

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MOLEKULALARNING TARTIBSIZ HARAKATI

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Annotatsiya. Ushbu maqolada molekulyar fizikaga oid ayrim qarashlar, shu jumladan molekulalarning tartibsiz harakatiga oid qarashlar muhokama etiladi.

Kalit so‘zlar: Fizika, molekula, metod, texnologiya.

KIRISH

Molekulyar fizika modda tuzilishini molekulyar-kinetik nazariya asosida o‘rganuvchi fizikaning bo‘limidir. Molekulyar-kinetik nazariya modda tuzilishi haqidagi klassik ta‘limot hisoblanadi. Demak, molekulyar fizika modda tuzilishi to‘g‘risidagi klassik nazariya ekan. Ushbu nazariyaning 3 ta fundamental asosi mavjud. Bular molekulyar-kinetik nazariyaning asosiy qonun-qoidalaridir.

Molekula- moddaning barcha kimyoviy xossalarini o‘zida mujassamlashtirgan moddaning eng kichik bo‘lagidir. Molekulyar fizikada modda molekulasini ma‘lum o‘lchamga ega bo‘lgan qattiq shardan iborat deb qaraladi. Nazariy hisoblashlar molekulaning radiusi 10^{-10} m tartibida ekanligini ko‘rsatadi.

Modda tuzilishini o‘rganishning ikki usuli mavjud:

1. Termodinamik usul. 2. Statistlik usul.

Termodinamik usulda modda yaxlit holda o‘rganiladi. Statistlik usulda esa har qanday moddani ko‘p zarrali sistema deb qaraladi. Bu sistemani xarakterlovchi kattaliklarning o‘rtacha qiymatiga qarab ushbu sistemaga baho beriladi. Ushbu kattaliklarning o‘rtacha qiymatini aniqlashda esa ehtimollar nazariyasi va matematik statistikadan foydalaniladi.

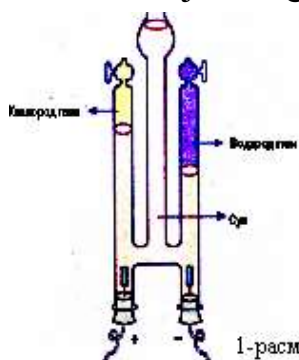
TADQIQOT METODOLOGIYASI VA EMPIRIK TAHLIL

Moddaning tuzilishi va holatini o‘rganish – molekular fizikaning asosiy vazifasidir. Mexanikani o‘rganayotganda moddaning tuzilishiga etibor berilmaydi, chunki jismlarning harakatini o‘rganishda bu muhim emas. Molekular fizika bo‘limi moddaning tuzilishi va holatiga asoslanib, fizik hodisalar va jarayonlarni o‘rganadi.

Atrofimizdagi jismlar o‘zining shaklini saqlash qobiliyati, harorati, issiqlik sig‘imi, siqiluvchanligi, rangi va boshqa ko‘plab xossalari bilan bir-biridan farqlanadi. Umumiy fizika kursining molekular fizika bo‘limida moddaning juda kichik zarralardan iboratligi (atomlardan, molekulalardan), bu zarralar betinim tartibsiz issiqlik harakatida bo‘lishi va o‘zaro ta’sirlashuvi bilan bog‘liq masalalar ko‘riladi.

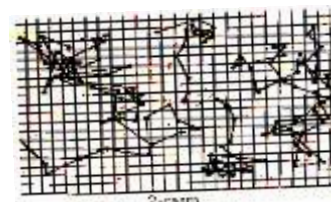
Modda haqida molekular tasavvurlar. Moddaning juda mayda zarralardan iboratligini tasdiqlovchi ko'plab ma'lumotlar, dalillar mavjud. Gazni chegaralab turuvchi devor uzoqlashtirilsa – gaz zarralari harakatini davom ettirib, ihtiyoriy katta hajmni to'ldirishi mumkin. Gazlarni bir-biriga yaxshi aralashishi, havoda hidlarni yaxshi tarqalishi (diffuziya hodisasi) gaz zarralari tinimsiz va tartibsiz harakatda degan hulosaga keltiradi. Moddalarning bir-biriga aralashish hodisasi suyuqlik, hattoki qattiq jismlarda ham aniqlangan, lekin gazlarda diffuziya ayniqsa intensiv ro'y beradi, qattiq jismlardagidan $\approx 10^{10}$ marotaba tezroq ro'y beradi.

Moddalarning kichik zarralari atomlar deb ataladi. Ularning 110 ga yaqin turlari Mendileev jadvaliga kiritilgan. Tabiatda ko'pincha atomlar bir-biri bilan kimyoviy bog'lanib, molekullarni tashkil etadi. Moddani atom va molekullardan tuzilishi haqidagi tasavvurlarni ilmiy asoslanishida **butun sonlar** qonunini ochilishi muhim qadam bo'lgan.



1-расм

1-rasmda elektroliz bo'yicha tajribalarni amalga oshirish qurilmasi keltirilgan. Eritmalarni elektrolizi paytida gazsimon moddalar ajralib chiqadigan hollarda bu qurilma ayniqsa qulaydir. Unda, masalan, 1 kub santimetr gaz hajmini etarlicha aniq o'lchash mumkin, voholangki bunday miqdor bir mol moddaning 0.005% ni tashkil etadi. Muhimi, tajribada ikki hil gaz ajralib chiqsa, ularni hajmlari butun sonlardek nisbatda bo'ladi. Masalan toza suvni elektroliz qilinsa, vodorod va kislorod gazlari ajralib chiqqanini aniqlash mumkin, va ajralib chiqadigan vodorod hajmi kislorod hajmidan ikki marta ortiq bo'ladi. Demak bitta tajriba suvning kimyoviy tarkibini aniqlash imkonini berar ekan. Fan rivojlanishi natijasida atomlarning ham murakkab tuzilishi aniqlangan, lekin buni fizikani boshqa bo'limlarida o'rganiladi.



2-расм

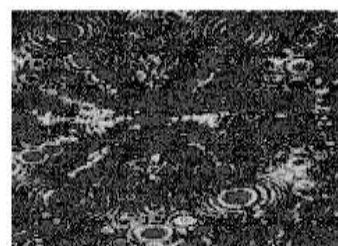
Broun harakati. Modda tuzilishi haqidagi atomistik (bo'linmas mayda zarralar) tasavvurlar qadimgi yunon faylasuflari Aristotel (Aflatun) va Demokrit asarlarida ham uchraydi. Lekin moddaning molekular tuzilishi haqidagi ilmiy asoslangan tasavvurlar Broun harakatini ochilishi va tushuntirilishi bilan bog'liq. Moddaning eng kichik zarralari – molekula va atomlar benihoya kichikligi tufayli kuzatilishi qiyin. 1827 yilda ingliz botanigi R.Broun suvdagi gul changlarini mikroskop yordamida kuzatgan. Bu zarralarning o'lchami 10^{-6} metr ga yaqin bo'lib, molekullardan deyarli 10 ming marotaba kattadir. Bu kuzatuvlarda zarralarning betinim va tartibsiz harakati aniqlandi. Broun harakati havodagi tutun zarralarida ham kuzatiladi. Kuzatuvchi nazarida tabiat tirilgandek bo'ldi. Bu kuzatuvlarni texnika yordamida yozib olish imkoniyatiga ega bo'lmagan olim, kuzatuv natijalarini ilmiy ravishda yozib ola

boshladi: bitta zarraning holatini (koordinatalarini) bir xil vaqt oraliqlarida katakli qog'ozga chiza boshladi.

2-rasmda suvdagi uchta zarrani Broun harakati tasvirlangan (Perron tajribasi). Nuqtalar har 30 sekundda chizilgan. Zarralar o'lchami $0.52 \cdot 10^{-6}$ m, kataklarni o'lchami $-3.4 \cdot 10^{-6}$ m.

Tajribada butunlay tartibsiz siniq chiziqlardan iborat tasvir paydo bo'ldi. Bunday murakkab va betartib chiziqlarda biron ma'lumot topish qiyindek tuyuladi. Lekin olimni izlanuvchanligi, ko'plab kuzatuvlari quyidagi hulosalarga olib keldi: bir zarracha uchun bu harakat intensivligi vaqt o'tishi bilan o'zgarmas ekan (1); temperaturaning oshishi (2), zarra o'lchamlarining kichikroq bo'lishi (3), qovushqoqligi kichikroq suyuqlikdagi harakatni kuzatilishi (4) harakat intensivligini oshishiga olib kelar ekan.

Broun harakatini tushuntirishda dastlab bu harakat biologik xarakterda emasligi aniqlandi, chunki havodagi tutun (chang) zarralari ham huddi shunday harakatlanar ekan. Broun harakatini suyuqlik yoki gazdagi konvektiv oqimlar bilan ham tushuntirib bo'lmaydi.



Yuqorida aytilganidek, kuzatilayotgan zarra o'lchamlarining oshishi, Broun harakatining sekinlashishiga olib keladi, va makroskopik jismlar uchun Broun harakati kuzatilmaydi. Kuzatilayotgan zarraning juda kichkina bo'lishi suyuqlik (yoki gaz) zarralari – molekularining betinim va tartibsiz harakatining (**issiqlik harakatining**) sezilishiga imkoniyat beradi. Molekulalarning harakati betartib bo'lgani uchun, ularning kuzatilayotgan zarraga ta'siri, zarbasi bir tekis bo'lmaydi. Suyuqlik (gaz) zichligi va bosimidagi bunday notekisliklar ilmiy tilda **fluktuatsiyalar** deb ataladi. Suyuqlik (gaz) molekularining tartibsiz harakati tufayli bu fluktuatsiyalarning yo'qolishini **relaksatsiya** hodisasi deyiladi. Broun harakati kuzatilishi – ana shu fluktuatsiyalarning namoyon bo'lishidir.

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ENERGIYANI AKKUMULYATSIYALASHNING O`ZIGA XOS JIHLTLARI

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Annotatsiya. Iste`molchining keragidan ortiq mavjud energiyani akkumulyatsiyalash (saqlash) jarayoni bir muncha noideal holatda desak mubolag`a bo`lmaydi. Zero mavjud energiyani saqlab qo`yish orqali, uni kerakli vaqtda va kerakli joyda ishlata olish muhim masalalardan biridir.

Kalit so`zlar: Energiyani akkumulyatsiyalash, quvvat manbai, energiya, generatorlar, energiya akkumulyatorlari, energiya tizimlari.

KIRISH

Qayta tiklanadigan energiya manbalari quyosh batareyalari, suv toshqini va shamol natijasida olinadigan energiya deyarli o`zgarmasdir, chunki uni ishlab chiqarish kunning vaqti, oy fazasi, fasl va ob-havo kabi tasodifiy omillarga bog`liq. Ko`p miqdordagi individual shamol generatorlarini ulash mumkin bo`lgan o`zgarishlar muammosini hal qilsa ham, quyosh energiyasi kechasi ishlamaydi, eritilgan tuzlardagi generatorlardan tashqari, gelmint stansiyalari oyning harakatlariga bog`liq, bu esa energiya maksimal yuk ostida bo`lishiga ishonch hosil qilishning iloji yo`q. Yozning eng jazirama kunlari bilan, asosiy ehtiyojlarni quyosh energiyasi bilan qondirish mumkin. Qish chillasining sovuqli kunlarida shamol generatorlari binoningisitish yuki bilan bog`liq bo`lishi va uni egallash uchun ishlatilishi mumkin. Ushbu omillarga qarab, ishlab chiqarilayotgan mahsulotning 20 dan 40 foizigacha fotoelektr va shamol generatorlari kabi tugab bo`lmaydigan energiya manbalariga to`g`ri keladi. Kelajakda elektr tarmoqlarida energiyani saqlash, iste`molchi yoki ikkalasi tomonidan energiyani boshqarish uchun investitsiyalar talab qilinishi mumkin.

TADQIQOT METODOLOGIYASI VA EMPIRIK TAHLIL

Energiyani akkumulyatsiyalashning turli xil usullari mavjud: kimyoviy, issiqlik, elektr, potensial va kinetik energiyalar ko`rinishida. Energetikada energiyani akkumulyatsiyalash yangi konsepsiya emas. Qazilma yoqilg`ilar ham tabiatning tayyorlagan yuqori zichligidagi kimyoviy energiya akkumulyatorlari bo`lib hisoblanadi. Ammo qazilma yoqilg`ilarning zaxiralari kamayishi bilan ular yanada uzoqlashadi va tobora qimmatlashib boradi. Demak, energiyani akkumulyatsiyalashning boshqa usullarini rivojlantirish zaruriyati tug`iladi.

Kommunal va transport sohalari elektr energiyasiga to`liq o`tishga intilmoqda va tepalik yuklari paytida ishonchli, samarali va tejamkor energiyani saqlash vatiklash

zarurati tez o‘tib bormoqda. Bataryalar, kondensatorlar, kinetik energiya, energiyani qizdirilgan yoki sovutilgan suyuqlik shaklida hamda vodorod shaklida saqlash — bularning barchasi mavjud va keng imkoniyatlar beruvchi eritmalardan foydalaniladi. Biroq, odatda, bizning hayotimizda bo‘lgani kabi, ideal usul yo‘q va bu texnologiyalarning har biri saqlangan energiyadan foydalanishga qarab o‘z afzalliklariga yega.

Zamonaviy shahar energiya ta‘minoti tizimlarini rivojlantirishda energiyani saqlash texnologiyalari tobora muhim rol o‘ynamoqda. Misol uchun, Qo‘shma Shtatlarda umumiy energiya saqlash quvvati allaqachon 2% yaqinlashib, birlashgan energiyani saqlash so‘nggi yillik o‘sish bilan, 50 GV's ga oshdi. Sanoat o‘zgaruvchan energiya landshaftiga moslashib, yangi texnologiyalarni joriy qilishda davom etmoqda.

Xususan transport sohasida kompaniyalar eng yuqori talabni qondirish uchun elektr transport vositalaridan foydalanish imkoniyatlarini o‘rganmoqdalar. Parklangan va quvvat manbaiga ulangan elektr transport vositalari bataryadan oqimni yuqori to‘plam paytida sotishi mumkin va ularni kechasi (uyda) yoki ishdan tashqari vaqtda ham zaryadlash mumkin. Gibrid transport vositalari yoki elektr transport vositalari energiya saqlash imkoniyatlari tufayli xaridorgirdir. Avtotransport vositalarini umumiy elektr tarmog‘iga ulash texnologiyasidan foydalanish har bir vositani 20-50 kVt soatlik bataryaya to‘plami bilan yuklarni muvozanatlash uchun taqsimlangan qurilmaga yoki favqulodda quvvat manbasiga aylantirishga imkon beradi. Bu har bir transport vositasining energiyasi kuniga 10 kVt / soat yoki yiliga 3650 kVt / soat bo‘lgan ehtiyoj bilan 2-5 kun davomida harakatlanish uchun yetarli bo‘ladi. Ushbu energiya miqdori 40-300 mil (64-483 km) yo‘lga teng bo‘lib, u har bir km uchun 0,16-0,5 kVt soat sarf qiladi. Ba‘zi bir elektr ta‘minoti tizimlari elektr energiyasini saqlash uchun eski elektr transport vositalarining bataryalarini (ba‘zan bitta ulkan birlikka birlashtirilgan) ishlatishni rejalashtirishmoqda. Biroq, elektr tarmog‘ida energiya to‘plash uchun transportdan foydalanishning jiddiy kamchiliklari, har bir saqlash sikli bataryani zaryadlash-tushirish davriga o‘xshash voltajga duchor qilishidir. An‘anaviy litium-ionli bataryalar ma‘lum miqdordagi sikllardan keyin yaroqsiz holga keladi, ammo zamonaviyroq bataryalar ancha uzoq umr ko‘rishlari mumkin, chunki ular har bir sikldan keyin yomon ishlay boshlamaydilar. Elektr tarmoqlarida energiya to‘plash uchun ishlatilgan elektr transport vositalarining bataryalarini qayta ishlatish imkoniyati mavjud, chunki ularning kutilgan muddati taxminan 10 yil. Agar bunday drayvlar katta miqyosda ishlatilishi kerak bo‘lsa, endi harakatlanish uchun ishlatib bo‘lmaydigan elektr transport vositasining zaryadsizlangan bataryasini kafolat ostida almashtirish ancha oson bo‘ladi.

XULOSA VA MUNOZARA

Ta‘rifdan ko‘rinib turibdiki, ushbu tizimlar kontaktlarning zanglashiga olib keladigan qisqa muddatli oqim o‘zgarishlarini yumshatish uchun mo‘ljallangan, ammo

bir necha kun davomida mavjud bo‘lgan tanqislikni qoplaymaydi. Avstraliyaning energetika kompaniyasi shamol turbinalari, volan va kichik yuklidizel dvigatellari texnologiyasidan foydalanib shamol fermalaridan kichik elektr tarmoqlariga kirish oqimini oshirish uchun yo‘nalishlarni ishlab chiqmoqda. Koral ko‘rfazida (G‘arbiy Avstraliya) o‘rnatilgan tizim shamol turbinalarida shahar elektr tarmoqlari uchun shamol energiyasining 60 foiz ulushiga erishish uchun volan va dizel dvigatellariga asoslangan boshqaruv tizimi bilan birgalikda ishlatadi.

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UCH SHOHLI NERV VA UNING PATALOGIYASI

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Annotatsiya: Mamlakatimiz tajribasini va eng yaxshi jahon yutuqlarini uyg'unlashtirish asosida tibbiyot fanini rivojlantirish strategiyasini va prognozlashni ishlab chiqish, ilmiy-tibbiy tadqiqotlar samaradorligini oshirish, fan, texnika va ilg'or tajriba yutuqlarini sog'liqni saqlash amaliyotiga joriy qilish.

Kalit so'zlar: V juft bosh miya nervi, uch shoxli nerv (n.trigeminus)ning anatomik tuzilishi, nevrologik kasalliklari, Nevralgiya, yuzning o'ng qismidagi og'riqlar.

Kirish: Uch shoxli nerv - bosh miya nervlarining V jufti. Varoliy ko'prigi bilan miyachaning o'rta oyog'i oralig'ida joylashgan. N.Trigiminusning sezuvchi, harakatlantiruvchi va vegetativ nerv tolalari farqlanadi. Uch shoxli nervning sezuvchi tolalari teri, shilliq qavat va og'iz ichini, harakatlantiruvchi nerv tolalari esa chakka va chaynov muskullarini innervatsiyalaydi. Uch shoxli nervning ko'p uchraydigan kasalliklaridan nevrалgiya kuchli og'riq bilan kechadi. Uch shoxli nerv nevrалgiyasi (shamollashi) kuchli depressiya, tashvish va uyqu buzilishining yuqori darajasi bilan bog'liq va bunda og'riq yuz hamda bo'yiga tarqaladigan, hatto eng kichik shamol nafasi bilan ham yuzaga keladigan yuz og'rig'ining eng keng tarqalgan turidir. Stenford universitetidagi Anesteziologiya va og'rig tadqiqotlari instituti inson his qilishi mumkin bo'lgan eng kuchli og'riq turlari reytingini tuzishdi.

Reytingga ko'ra, uch shoxli nervning yalig'lanishi eng kuchli og'riq berar ekan. Bu og'riqni his qilganlar uni 10 balli shkaladan 10 ballga baholashgan. Uch shoxli nerv nevrалgiyasi tarqalishi juda yuqori bo'lib, Jahon sog'liqni saqlash tashkiloti ma'lumotiga ko'ra kasallanish darajasi har 10000 aholiga 2-4 tani tashkil etadi. Statistika ko'ra dunyo bo'ylab 1 milliondan ortiq odamlar mazkur kasallik bilan aziyat chekmoqda. Ko'pincha bu kasallik 50-70 yoshlik ayollarda (ayollar va erkaklar kasallanishi 3:1 nisbatda) uchraydi. Nevralgiyaning ushbu turi birinchi marta 1773-yili shifokor Jon Foterjill tomonidan tasvirlangan va Edinburg universiteti tibbiyot fakulteti bitiruvchisi Jon Murray Karnochan tomonidan jarrohlik yo'li bilan

davolanagan. Bemorlarda kuchli og'riq va suitsidga moyillikning yuqoriligi tufayli ushbu kasalik tarixan "o'z joniga qasd qilish kasalligi" deb ham nomlangan.

Odatiy simptomlari: yuzning bir tomonida bir necha soniyadan bir daqiqagacha davom etadigan kuchli, to'satdan, shokka o'xshash og'riq kuzatiladi. Noodatiy simptomlarida esa doimiy, to'xtovsiz davom etadigan kuchli og'riq kuzatiladi. Kasallikning aniq sabablari aniqlanmagan, ammo rivojlanishiga turli qon tomirlari, endokrin-metabolik, allergik kasalliklar, shuningdek psixogen omillar sabab bo'ladi.

Ko'p hollarda uch shoxli nerv nevrologiyasi tish og'rig'i singari namoyon bo'ladi. Dastavval bemor tish og'ridan shikoyat qilib stomatologlarga murojaat qiladi. Bu og'riqni tarqatish zonasi nafaqat yuzda, balki og'iz bo'shlig'ida joylashganligi bilan bog'liq. Ayrim hollarda bemorning qistovi bilan sog'lom tishlar ham olib tashlanadi, Shunga qaramay og'rig boshqa tishlarda paydo bo'ladi. Og'riq chidab bo'lmas darajaga yetadi, bu xuddi bemorning yuz qismiga elektr toki urgandek namoyon bo'ladi. Tishlarni tozalash ovqatlanish, sovuq havo va hatto gaplashish ham og'riqni qo'zg'atib yuboradi. Asabga zarar yetkazish odatda yuzning shikastlanishi, burun bo'shliqlarida yallig'lanish yoki davolanmagan tishlar sababli vujudga keladi. Nevralgiyaning oldini olish faqat yallig'lanish jarayonlarini oldini olish orqali davolash mumkin. Chunki o'smalarning rivojlanishiga yoki yuqumli kasalliklar paydo bo'lishiga ta'sir qila olmaymiz.

Xulosa: V juft uch shoxli nervni shikastlanish yuz sohasidagi og'riqlarni vujudga keltiradi. Asosan og'riq yuzning o'ng yarmida hurujlar shaklida uchraydi. Nevralgiyaning yangi xurujlari ehtimolini kamaytirish uchun quyidagi oddiy qoidalarga rioya qilish kerak: stressdan qochish, ko'proq uxlash, spirtli ichimliklarni iste'mol qilishda me'yorga rioya qilish, jismoniy faollikni cheklash, shuningdek yallig'lanish va yuqumli kasalliklarni o'z vaqtida davolash kerak.

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THE SIGNIFICANCE OF ENDOTHELIAL DYSFUNCTION IN RHEUMATOID ARTHRITIS

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Abstract: In this article you can read about rheumatoid arthritis (RA) patients are at higher risk of accelerated atherosclerosis.

Key words: atherosclerosis rheumatoid arthritis endothelial dysfunction erythrocyte sedimentation rate, antirheumatic agents brachial artery endothelium c-reactive protein morbidity, tumor necrosis diameter fluid flow.

The systemic autoimmune disease rheumatoid arthritis (RA) is characterized by increased cardiovascular mortality and morbidity and is an independent cardiovascular risk factor. Cardiovascular diseases (CVDs) result from accelerated atherogenesis, which is a consequence of endothelial dysfunction in the early stages of the disease. Endothelial dysfunction is a functional and reversible alteration of endothelial cells and leads to a shift in the properties of the endothelium towards reduced vasodilation, a pro-inflammatory state, and proliferative and prothrombotic properties. In RA, endothelial dysfunction can occur in the large vessels (such as the conduit arteries) and in the small vessels of the microvasculature, which supply oxygen and nutrients to the tissue and control inflammation, repair and fluid exchange with the surrounding tissues. Growing evidence suggests that microvascular endothelial dysfunction contributes to CVD development, as it precedes and predicts the development of conduit artery atherosclerosis and associated risk factors. As such, numerous studies have investigated microvascular endothelial dysfunction in RA, including its link with disease activity, disease duration and inflammation, the effect of treatments on endothelial function, and possible circulating biomarkers of microvascular endothelial dysfunction. Such findings could have important implications in the cardiovascular risk management of patients with RA.

The recognition that rheumatoid arthritis (RA) patients are at a heightened risk of cardiovascular disease (CVD) events and mortality now spans more than two decades. During this period, much has been learned about the magnitude of the problem. In a large meta-analysis of 24 cohort studies [1], CVD mortality was 50% higher in RA compared with non-RA populations. Similarly, the relative increase in the risk of myocardial infarction (MI) and stroke was 68% and 41%, respectively [2]. Independent of atherosclerotic ischemic heart disease, RA patients are also at a heightened risk of myocardial dysfunction [3] and overt heart failure [4]. CVD is the primary cause of death in RA patients [5], and as CVD events, such as MI and stroke, tend to occur at

an earlier age in RA compared with the general (non-RA) population, life expectancy is reduced.

Premature CVD is a contributor to the widened mortality gap observed between RA and non-RA populations [6]. Although there are some indications that this gap may be closing with the widespread adoption of early and aggressive treatment strategies [7], not all recent studies demonstrate the same promising trend [8], suggesting that CVD in RA remains a significant public health problem.

Reducing CVD event rates and mortality in RA requires the identification of susceptible subgroups and high-impact causal determinants. A substantial number of observational epidemiologic studies have sought to identify the RA-specific characteristics associated with CVD risk factors (traditional, nontraditional, and inflammatory), intermediate measures (i.e., atherosclerosis and atherothrombosis), and CVD events in RA. However, it is important to understand that these studies identify associations only, and, despite the number of studies that have been conducted, an incomplete understanding of causal determinants remains. Consistency and temporality are among the primary criteria for arguing causality in observational studies. However, there is notable heterogeneity in the factors identified as associated with RA CVD across studies, which may in part be explained by differing outcomes, populations, and exposure periods studied. Few are longitudinal, and among those that are, follow-up times are often limited, making the assessment of the association of exposure to outcome problematic. In addition, many combine RA patients at varying stages of disease, limiting the ability to identify subgroups of RA patients at heightened risk. Most rely on single point in time assessments of CVD risk factors and articular/systemic inflammation, which is problematic in a disease in which substantial time variance in risk factors is expected, both as a natural function of disease fluctuation and with treatment. It is not surprising, then, that our understanding of the determinants of CVD in RA remains limited.

Even with consistency and temporality demonstrated across multiple observational cohorts, more is required to justify health policy recommendations. Here, trials are essential to provide evidence that specific interventions affect outcomes. Unfortunately, there are few trials evaluating the efficacy of specific interventions for either primary or secondary prevention of CVD in RA, and none evaluating the effectiveness of preventive strategies in the setting of the delivery of RA clinical care. The scarcity of these trials is understandable given that (1) causal determinants from observational studies on which to base trials are uncertain, (2) trials with CVD events as outcomes often require large numbers (i.e., thousands) of enrollees, and (3) although the most common autoimmune inflammatory arthritis, RA is still relatively uncommon in the general population, and many of the most severely affected (and thus potentially most at risk of adverse CVD events) are unable or unwilling to participate in clinical

trials. The recent Trial of Atorvastatin for the Primary Prevention of Cardiovascular Events in RA (TRACE RA) Trial (discussed subsequently) is testament to these challenges.

Tasked with caring for RA patients in 2015, what must the practicing rheumatologist do? Most will find it unacceptable to await definitive trials of CVD screening and treatment strategies specifically developed in RA populations, which remain years to a decade or more in the future. Short of these, extrapolations from observational studies of RA patients and trials of non-RA populations with some applicability to RA may provide some insight into areas for intervention. However, any recommendations based on lower levels of evidence require the consideration of possible adverse effects, which include not only direct adverse effects of testing and treatments but also indirect adverse effects, such as diverting resources and attention to interventions that may have no value. Even in the setting of known increased risk, current practice for treating CVD risk factors in RA patients is generally poor.

This review focuses on studies exploring determinants of CVD risk factors, intermediates, and events in RA, and studies evaluating CVD screening and treatment strategies for clinical practice. Current expert-opinion-based recommendations are discussed, with the current level of evidence reviewed in the context of a research agenda targeting a more rigorous approach to primary and secondary CVD screening and prevention in RA. There is a paucity of literature regarding the screening and prevention of cerebrovascular disease and myocardial dysfunction in RA. As such, this review concentrates on coronary and extra-coronary atherosclerosis as it pertains to the prediction of ischemic heart disease events.

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DISTURBANCE IN THE HEMOSTATIC SYSTEM IN RHEUMATOID ARTHRITIS

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Abstract

Disturbance of fibrinolysis is common in rheumatoid arthritis (RA), and it may be associated with the increased cardiovascular risk observed in this population. We aimed to assess coagulation derangement and investigate whether abnormalities are influenced by demographic, inflammatory or metabolic factors in patients with RA. Levels of tissue plasminogen activator (tPA), plasminogen activator inhibitor (PAI-1), fibrinogen, prothrombin fragment 1 + 2 (PF1 + 2), thrombomodulin (TM), protein C and Von Willebrand factor (vWF) were compared between 141 RA patients and 50 healthy hospital controls. Within RA, coagulation factors were assessed alongside several demographic, inflammation and metabolic indicators. RA patients had higher levels of coagulation factors than controls. After correction for age and sex, having RA predicted increased tPA ($B = 0.15$, $P < 0.001$), PAI-1 ($B = 0.21$, $P < 0.001$), fibrinogen ($B = 0.86$, $P < 0.001$), PF1 + 2 ($B = 0.20$, $P < 0.001$), and TM ($B = 0.01$, $P = 0.03$) levels. CRP correlated positively with tPA ($P < 0.05$), fibrinogen ($P < 0.001$), TM ($P < 0.05$), PF1 + 2 ($P < 0.001$) and vWF ($P < 0.001$). Metabolic factors linked with coagulation factors were hypertriglyceridaemia (tPA, $P < 0.05$; PAI-1, $P < 0.05$; protein C, $P < 0.05$) and insulin resistance (tPA, $P < 0.01$; PAI-1, $P < 0.01$; vWF, $P < 0.05$). Imbalance of coagulation and fibrinolytic mechanisms is common in RA and associates with age, inflammation, and metabolic factors. Further studies may determine whether these abnormalities are the consequence of acute inflammation or markers of vascular dysfunction.

Key words: RA inflammation, associates, coagulation.

Objectives: To assess the outcome of ACS in rheumatoid arthritis compared with case matched controls in the context of underlying cardiac risk factors, clinical presentation, and subsequent management.

Methods: 40 patients with rheumatoid arthritis and ACS identified from coronary care admission registers between 1990 and 2000 were case matched as closely as possible for age, sex, classical cardiovascular risk factors, type and severity of ACS, and admission date (± 3 months) with 40 controls. A standardised proforma was used for detailed case note review.

Results: Age, sex, other cardiovascular risk factors, and type and severity of presenting ACS were not significantly different between cases and controls. Recurrent cardiac events were commoner in rheumatoid arthritis (23/40, 57.5%) than controls (12/40, 30%) ($p=0.013$); there were 16/40 deaths in rheumatoid arthritis (40%) v 6/40 (15%) in controls ($p=0.012$). Recurrent events occurred earlier in rheumatoid arthritis (log rank survival, $p=0.05$). Presentation with chest pain occurred in all controls compared with 33/40 rheumatoid patients (82%) ($p=0.006$); collapse occurred in one control (2.5%) v 7/40 rheumatoid patients (17.5%) ($p=0.025$). Treatment during the ACS was not significantly different in the two groups.

Conclusions: Recurrent ischaemic events and death occur more often after ACS in rheumatoid arthritis. Atypical presentation is commoner in rheumatoid arthritis. There is an urgent need to develop identification and intervention strategies for ACS specific to this high risk group.

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THE SIGNIFICANCE OF ENDOTHELIAL DYSFUNCTION IN HEMORRHAGIC VASCULITIS

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Abstract

Immunoglobulin A (IgA) vasculitis (IgAV), also known as Henoch-Schönlein purpura, is the most common form of childhood vasculitis. It is characterized by cutaneous hemorrhage, resulting from red blood cell leakage into the skin or mucosae, possibly caused by damage to small blood vessels. These acute symptoms usually disappear without treatment. Endothelial cells are distributed on the inner surfaces of blood vessels and lymphatic vessels, and have important functions in metabolism and endocrine function, as well as being the primary targets of external stimuli and endogenous immune activity. Injury to endothelial cells is a feature of IgA vasculitis. Endothelial cell damage may be related to the deposition of immune complexes, the activation of complement, inflammatory factors, and chemokines, oxidative stress, hemodynamics, and coagulation factors. Both epigenetic mechanisms and genetic diversity provide a genetic background for endothelial cell injury. Here, research on the role of endothelial cells in allergic IgA vasculitis is reviewed.

Key words: endothelial cells, vasculitis, inner surfaces, hemodynamics, system of complement, vascular endothelial injury, metabolomics markers, gene polymorphisms, immunoglobulin A vasculitis.

Immunoglobulin A (IgA) vasculitis (IgAV) is a systemic disease typified by leukocyte burst vasculitis, involving the deposition of capillaries and IgA immune complexes (Pillebout and Sunderkötter, 2021). Over 90% of IgAV patients are below the age of 10 (Gardner-Medwin et al., 2002; Yang et al., 2005; Leung et al., 2020). Epidemiological studies have shown that the incidence of IgAV is higher in Asians than in Caucasians and Africans (Gardner-Medwin et al., 2002). Renal injury, known as IgA vasculitis with nephritis (IgAVN), is a major manifestation in IgAV, with potentially fatal outcomes. During the first 4–6 weeks of IgAV onset, about 40% of children with IgAV may develop IgAVN (Saulsbury, 2010), and persistent purpura, severe abdominal symptoms, and older age are three risk factors for IgAVN (Buscatti et al., 2018). It is important to consider IgAV in clinical diagnosis, differential diagnosis, and treatment. Understanding the pathogenetic mechanism of IgAV is necessary for the provision of suitable treatment and medication, and this involves investigation of the association between vascular endothelial injury and IgAV.

Endothelial cells (ECs) are flat cells that form a highly differentiated monolayer on the inner surfaces of blood and lymphatic vessels. ECs have vital metabolic and endocrine functions in the human body. They are responsible for maintaining vascular permeability, stability of circulation, and anticoagulation, and are also the primary targets of attack by external stimuli and immune complexes (Yang et al., 2002; Cardinal et al., 2018). Injury to ECs is the first step in the development of a variety of vascular conditions, such as atherosclerosis (Kim et al., 2021), diabetic nephropathy (Mahdy et al., 2010), and hypertension (Li et al., 2021). Recent evidence has linked EC injury to the pathogenesis of IgAV, together with the development of proteinuria. This can lead to glomerular sclerosis, renal interstitial fibrosis, and damaged renal function. Matrix deposition is a pathological outcome and contributes to the formation of vascular lesions; this includes the deposition of immune complexes, metabolites, and enzymes such as oxidases and proteases, and is closely related to immune vascular damage. Matrix deposition is coordinated by the complement system, inflammation, the immune response, and metabolic abnormalities, in association with genetic polymorphism, and leads to the replacement of normal tissue. This replacement leads to abnormal cellular respiration and renal vascular hypoxia, with an increase in reactive acidic products, promoting the contraction of vascular endothelial cells and the widening of the inter-cellular spaces, leading to hematuria and renal fibrosis in a vicious circle that eventually results in kidney failure. In this review, we discuss EC injury in terms of complement activation, the formation of IgA1 immune complexes, chemotactic and inflammatory cytokines (Heineke et al., 2017), coagulation factors, epigenetics, and genetic polymorphisms, amongst other factors, in the pathogenesis of IgAV.

Go to:

Immunoglobulin A-Containing Immune Complexes

In IgAV, galactose-deficient IgA1 (Gd-IgA1) can be detected not only in the serum but also in the skin and kidney tissue (Neufeld et al., 2019; Oni and Sampath, 2019; Zhang et al., 2020), and IgA1-containing immune complexes, especially IgA1 accumulation in vessel walls, promote the development of IgAV. A multi-hit hypothesis is generally considered to illustrate the role of Gd-IgA1 in the pathogenesis of IgAV. IgA is a major class of immunoglobulins present in mucosal secretions where they are closely involved with mucosal immunity. There are two IgA subclasses, IgA1 and IgA2, with approximately 90% of circulating IgA monomers belonging to IgA1. The hinge region of the IgA1 molecule contains three to six O-glycosylation sites allowing the addition of Gal-GalNAc disaccharides. These glycosylated Gd-IgA1 proteins auto-aggregate or bind to IgG molecules that recognize galactose-deficient IgA. These immunoglobulin complexes may be too large to access the space of Disse in the liver and are, therefore, able to avoid coming into contact with hepatic receptors

and can thus avoid degradation by hepatic cells. The IgA1 complexes thus accumulate in the circulation where they bind and activate Fc α R1 transmembrane receptors on ECs, forming a soluble IgA1-sCD89 complex (van Zandbergen et al., 1999). This induces a widespread pro-inflammatory reaction involving the recruitment of neutrophils, activation of downstream signaling pathways, the release of neutrophil extracellular traps (NETs) resulting in the induction of NETosis and elevation of the levels of reactive oxygen species (ROS). Antibody-mediated cytotoxicity may also occur, together with cytokine and chemokine secretion, leading to EC injury (Aleyd et al., 2014; Heineke et al., 2017; Takeuchi et al., 2021). Furthermore, the activation of Fc α R1s triggers the release of leukotriene B4 (LTB4), which activates and attracts neutrophil migration, forming a feedback loop (van der Steen et al., 2009). The pro-inflammatory cytokine, tumor necrosis factor-alpha (TNF- α), which is released by neutrophils, can activate ECs, inducing them to expose the hidden β 2-glycoprotein I antigen (β 2GP I) (Kim et al., 2021). Recognition of anti-endothelial cell antibodies (AECA) in combination with β 2GP I activates the MEK/REK signaling pathway, along with the release of IL-8 and chemokines that attract polymorphonuclear leukocytes and monocytes (Yang et al., 2006, 2012). Pathogens, such as bacteria or viruses, induce similar IgA activities that are able to crosslink with ECs to propagate downstream signals. IgA1 complexes also stimulate mesangial cells through the transferrin receptor CD71 to trigger both proliferation and matrix production, leading to the release of angiotensin II, nitric oxide synthase, and cytokines, which appear to play key roles as direct or indirect effectors of EC damage by triggering acute and chronic inflammatory reactions (Chen et al., 1994; Novak et al., 2012).

It has been found that the sera of patients with active IgAV can induce the production of the chemokines CCL5, CXCL16, and CXCL1, as well as promote migration in dermal microvascular ECs and the human HL-60 leukemic and THP-1 monocytic cell lines (Chen et al., 2011a). It has also been found that patients' sera promoted the translocation of nuclear factor- κ B (NF- κ B) p65 to the nucleus and stimulated phosphorylation of the extracellular signal-regulated kinase ERK1/2 protein. These findings indicate that sera from patients with active IgAV may damage ECs and stimulate chemokine secretion through the NF- κ B and ERK1/2 pathways (Figure 1). Yuan et al. (2014) observed upregulation of the pro-apoptotic protein Bax and downregulation of the anti-apoptotic protein Bcl-2 in ECs cultured with IgA1 isolated from IgAV patients. This suggests that IgA1 can induce EC apoptosis, which may be linked to the vascular endothelial injury seen in IgAV. This IgA1-induced apoptosis of ECs may occur through the activation of apoptotic cell protease activator-1 and pro-teogen-9, forming apoptotic bodies and reducing the downstream effectors, cysteine proteases 3, 6, and 7 (Steinberg et al., 2007). In summary, IgA1-containing immune complexes can induce inflammatory reactions by activating

inflammatory signaling pathways and recruiting neutrophils, together with regulating the expression of apoptosis-related proteins, all of which could ultimately result in EC injury and promote the development of IgAV.

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DISTURBANCES IN THE HEMOSTATIC SYSTEM IN HEMORRHAGIC VASCULITIS

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Abstract

In this article you can read about disturbances in the hemostatic system in hemorrhagic vasculitis.

Key words: primary hemostasis, hemorrhagic vasculitis, system, disturbances.

Hemostasis is the physiological process by which a bleeding stops. Its final result is a thrombus (blood clot), which consists of blood cells and fibrin strands. Hemostasis involves the following mechanisms:

Primary hemostasis

Vascular hemostasis: transient vasoconstriction and vWF activation following endothelial injury

Platelet hemostasis: adhesion, activation, and aggregation of platelets, which results in the formation of a platelet plug (white thrombus)

Secondary hemostasis: activation of the coagulation cascade, which results in the formation of a fibrin clot (red thrombus)

Primary hemostasis

Definition: : processes involved in the formation of a platelet plug (white thrombus) following endothelial injury

Vascular hemostasis

Endothelial injury results in:

Neural stimulation reflexes and endothelin release → transient vasoconstriction, leading to:

Reduced blood flow

Platelet accumulation at the vessel walls

Exposure of subendothelial collagen → circulating von Willebrand factor binds to the exposed collagen

Von Willebrand factor (vWF): plasma protein that is synthesized by and stored in endothelial cells (in Weibel-Palade bodies) and platelets (in α -granules)

Mediates platelet adhesion and aggregation

Binds factor VIII (and thereby prevents its degradation)

Platelet hemostasis

Platelet adhesion: platelets bind to vWF via platelet GpIb receptor at the endothelial injury site

Ristocetin normally activates vWF to bind to glycoprotein Ib

Platelet activation: After binding to vWF, platelets change their shape and release mediators that lead to activation of more platelets (positive feedback). ; These mediators include:

Adenosine diphosphate (ADP): promotes adhesion of platelets to endothelium

Thromboxane A₂ (TXA₂): activates additional platelets and promotes vasoconstriction

Calcium: required for secondary hemostasis

Platelet-activating factor (PAF): a phospholipid mediator that is produced by platelets and inflammatory cells (e.g., neutrophils, monocytes, macrophages), involved in platelet aggregation and activation and local inflammatory response

Platelet aggregation

Mediated by GpIIb/IIIa-receptor and fibrinogen → formation of a white thrombus composed of platelets and fibrinogen

A white thrombus is transient, unstable, and easily dislodged. It stabilizes through the process of secondary hemostasis.

Preview thumbnail for image: Primary hemostasis
Shape of inactive and active platelet
Chalk Talk: Primary hemostasis 1
Chalk Talk: Primary hemostasis.

Conclusion

Bleeding disorders are a group of heterogeneous conditions characterized by defects in hemostasis that lead to an increased susceptibility to bleeding (also known as hemorrhagic diathesis). They are classified into disorders of primary hemostasis (when caused by a platelet abnormality), disorders of secondary hemostasis (when caused by defects in the extrinsic and/or intrinsic pathway of the coagulation cascade), and hyperfibrinolysis (when there is increased clot degradation). Although clinical features may overlap, mucocutaneous bleeding (e.g., epistaxis, petechiae, gastrointestinal bleeding) is associated with disorders of primary hemostasis, and bleeding into potential spaces (e.g., hemarthrosis, muscular bleeding) is characteristic of disorders of secondary hemostasis. The diagnostic workup of a bleeding disorder begins with a detailed clinical assessment, the CBC, and a coagulation panel. This typically allows the disorder to be classified as one of primary or secondary hemostasis. Specialized studies are then required to determine the specific etiology so that treatment can be initiated. Treatment may include transfusion of blood products, replacement of specific coagulation factors, or administration of adjuvant medications (e.g., tranexamic acid or desmopressin).

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- 1.Wolfe F, Freundlich B, Straus V (2003) Increase in cardiovascular and cerebrovascular disease prevalence in rheumatoid arthritis. *J Rheumatol* 30:36–40
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MODERN METHODS OF TREATMENT FOR HEMORRHAGIC VASCULITIS

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Abstract

Vasculitis poses a great diagnostic, investigative and therapeutic challenge to the treating physician. The classification of vasculitides itself still eludes universal acceptance. Comprehensive management comprises establishing the diagnosis of true vasculitis after ruling out vasculitis mimics, finding the etiology if feasible, assessing the caliber of the vessels involved, deciphering the pathological process of vessel damage, investigating for the existence and extent of systemic involvement and finally planning the therapy in the background of co-morbidities. Successful management also entails regular monitoring to foresee complications arising from the disease process itself as well as complications of immunosuppressive treatment. Although steroids remain first line drug, biologics are emerging as popular agents in the treatment of immune-mediated vasculitis. Triphasic treatment is the best plan of action comprising induction, maintenance of remission and treatment of relapses.

Keywords: Biomarkers, classification, management, vasculitis.

Vasculitis affects nearly 38-40 persons per million population.[2] Cutaneous vasculitis is predominantly due to infections in 22%, drugs in 20%, connective tissue disorders in 12%, Henoch Schonlein purpura (HSP) in 10% and <5% each due to malignancy, primary systemic vasculitis or systemic inflammatory disease.[3,4] Yet, exact etiology may not be established in spite of exhaustive work up in many case scenarios and idiopathic nature predominates. The mean age of onset is 7 years in children, 47 years in adults, vasculitis being, commoner in adults than children.[5] Successful management of the patient with vasculitis syndrome depends on good history taking, diligent physical examination and relevant investigations to confirm the diagnosis of vasculitis and assess systemic involvement.[6] The article attempts to cater this need providing a checklist for dermatologists to approach a case of vasculitis and treatment update

Vasculitis is a syndrome with an array of clinical features as localized/systemic symptoms, visceral signs due to stratified dysfunction at specific cellular, tissue or organ involvement, specific and non-specific inflammatory symptoms to be put together for final diagnosis evolving over weeks to months [Figure 1]. In primary vasculitis (inflammation of vessel wall as an initial event in the absence of recognized precipitating disease or associated disease), auto immune mechanism is believed to

play a key role.[7] Both humoral and cell-mediated immunity are implicated. Genetics, environmental factors, immune regulatory mechanisms render the patient susceptible to develop vasculitis.[4,5] Selective involvement of few vessels may be explained by the distribution of the antigen, local immune and inflammatory cascade.

Blood tests. These tests look for signs of inflammation, such as a high level of C-reactive protein. A complete blood cell count can tell whether you have enough red blood cells. Blood tests that look for certain antibodies — such as the anti-neutrophil cytoplasmic antibody (ANCA) test — can help diagnose vasculitis.

Imaging tests. Noninvasive imaging techniques can help determine which blood vessels and organs are affected. They can also help the doctor monitor whether you are responding to treatment. Imaging tests for vasculitis include X-rays, ultrasound, computerized tomography (CT), magnetic resonance imaging (MRI) and positron emission tomography (PET).

X-rays of your blood vessels (angiography). During this procedure, a flexible catheter, resembling a thin straw, is inserted into a large artery or vein. A special dye is then injected into the catheter, and X-rays are taken as the dye fills the artery or vein. The outlines of your blood vessels are visible on the resulting X-rays.

Biopsy. This is a surgical procedure in which your doctor removes a small sample of tissue from the affected area of your body. Your doctor then examines this tissue for signs of vasculitis.

References:

- 1.Wolfe F, Freundlich B, Straus V (2003) Increase in cardiovascular and cerebrovascular disease prevalence in rheumatoid arthritis. *J Rheumatol* 30:36–40
- 2.Douglas KMJ, Pace AV, Treharne GJ, Saratzis A, Nightingale P, Erb N, Bankd MJ, Kitas GD (2005) Excess recurrent cardiac events in rheumatoid arthritis patients with acute coronary syndrome. *Ann Rheum Dis* 65:348–353.
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MOLECULAR MECHANISMS OF DYSFUNCTION IN HEMORRHAGIC VASCULITIS

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Abstract

Various pathogenic mechanisms have been implicated in the induction of vasculitis, including cell-mediated inflammation, immune complex-mediated inflammation and autoantibody-mediated inflammation.

Keywords: Biomarkers, classification, management, vasculitis.

Despite the lack of vasculitis in animal models of chronic serum sickness, current evidence implicates immune complex deposition as the primary pathogenic mechanism in vasculitis associated with chronic infections such as hepatitis B and hepatitis C-associated mixed cryoglobulinaemia, which primarily affect small. Pathophysiology of Vasculitis

A description of vessel wall damage (eg, type and location of inflammatory infiltrate, extent and type of damage, presence or absence of fibrinoid necrosis) A description of healing responses (eg, intimal hypertrophy, fibrosis).

Pathophysiology of Vasculitis

Histologic description of an affected vessel should include the following:

A description of vessel wall damage (eg, type and location of inflammatory infiltrate, extent and type of damage, presence or absence of fibrinoid necrosis)

A description of healing responses (eg, intimal hypertrophy, fibrosis)

Certain features (eg, predominant inflammatory cell type, location of inflammation) suggest particular vasculitic processes and may aid in the diagnosis. For example, in many acute lesions, the predominant inflammatory cells are polymorphonuclear leukocytes; in chronic lesions, lymphocytes predominate.

Inflammation may be segmental or involve the entire vessel. At sites of inflammation, varying degrees of cellular inflammation and necrosis or scarring occur in one or more layers of the vessel wall. Inflammation in the media of a muscular artery tends to destroy the internal elastic lamina. Some forms of vasculitis are characterized by giant cells in the vessel wall. In some vasculitic disorders, such as granulomatosis with polyangiitis or Kawasaki disease, the vessel inflammation (true vasculitis) is only part of the pathophysiology and there is predominant parenchymal inflammation in a characteristic pattern that involves specific organs.

Leukocytoclastic vasculitis is a histopathologic term used to describe findings in small-vessel vasculitis. It refers to breakdown of inflammatory cells that leaves small nuclear fragments (nuclear debris) in and around the vessels. Inflammation is transmural and nongranulomatous. Polymorphonuclear leukocytes predominate early; later, lymphocytes predominate. Resolution of the inflammation tends to result in fibrosis and intimal hypertrophy. Intimal hypertrophy or secondary clot formation can narrow the vessel lumen and cause tissue ischemia or necrosis.

The term 'systemic vasculitis' describes a heterogeneous group of rare diseases, the systemic vasculitides, characterized by inflammation and fibrinoid necrosis of blood vessel walls. Vasculitis may be primary in origin (with no identifiable cause) or it may be secondary to infection, malignancy, or autoimmune disease. Although rare, there is evidence to suggest that vasculitis accelerating atherosclerosis is a complicating feature of most, possibly all, autoimmune diseases. This includes connective tissue diseases (CTDs) such as rheumatoid arthritis (RA), scleroderma, sarcoidosis and systemic lupus erythematosus (SLE).

In this review, which focuses on vasculitis associated with CTDs, we look at the progress that has been made in classifying the systemic vasculitides and discuss the pathogenesis of systemic vasculitides in CTDs and their adverse clinical sequelae, giving particular attention to RA and SLE. The standardized treatment for vasculitis is effective in the majority of patients, but some relapse and need other therapeutic approaches. In evaluating new treatment strategies for the management of systemic vasculitis, we explore the role of endothelin (ET)-1 in systemic vasculitides and discuss the therapeutic potential of endothelin receptor blockade in these entities.

Classification of the systemic vasculitides

Early attempts to classify systemic vasculitis into discrete categories were based primarily on blood vessel size, and indeed that approach still underpins more recent classification schemes.

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CHANGES IN THROMBOCYTOGRAM INDICATORS AGAINST THE BACKGROUND OF ANTIVIRUS THERAPY IN PATIENTS WITH LIVER CIRRHOSIS WITH HCV ETIOLOGY

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Abstract

Nearly 290000 patients with chronic hepatitis C die annually from the most severe complications of the disease. One of them is liver cirrhosis, which occurs in about 20% of patients chronically infected with the hepatitis C virus (HCV). Direct-acting antivirals (DAAs), which replaced interferon (IFN)-based regimens, significantly improved the prognosis of this group of patients, increasing HCV eradication rates and tolerability of therapy. Our study is the first to assess changes in patient profile, effectiveness, and safety in the HCV-infected cirrhotic population in the IFN-free era.

Keywords: Direct-acting antivirals; Epidemiology; Genotype-specific; Hepatitis C; Liver cirrhosis; Pangenotypic.

Aim

To document changes in patient characteristics and treatment regimens along with their effectiveness and safety profile over the years.

Methods

The studied patients were selected from 14801 chronically HCV-infected individuals who started IFN-free therapy between July 2015 and December 2021 in 22 Polish hepatology centers. The retrospective analysis was conducted in real-world clinical practice based on the EpiTer-2 multicenter database. The measure of treatment effectiveness was the percentage of sustained virologic response (SVR) calculated after excluding patients lost to follow-up. Safety data collected during therapy and the 12-wk post-treatment period included information on adverse events, including serious ones, deaths, and treatment course.

Results

The studied population (n = 3577) was balanced in terms of gender in 2015-2017, while the following years showed the dominance of men. The decline in the median age from 60 in 2015-2016 to 57 years in 2021 was accompanied by a decrease in the percentage of patients with comorbidities and comedications. Treatment-experienced patients dominated in 2015-2016, while treatment-naive individuals gained an advantage in 2017 and reached 93.2% in 2021. Genotype (GT)-specific options were more prevalent in treatment in 2015-2018 and were supplanted by pangenotypic combinations in subsequent years. The effectiveness of the therapy was comparable

regardless of the period analyzed, and patients achieved an overall response rate of 95%, with an SVR range of 72.9%-100% for the different therapeutic regimens. Male gender, GT3 infection, and prior treatment failure were identified as independent negative predictors of therapeutic success.

Conclusion

We have documented changes in the profile of HCV-infected cirrhotic patients over the years of accessibility to changing DAA regimens, confirming the high effectiveness of IFN-free therapy in all analyzed periods.

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- 1.Wolfe F, Freundlich B, Straus V (2003) Increase in cardiovascular and cerebrovascular disease prevalence in rheumatoid arthritis. *J Rheumatol* 30:36–40
- 2.Douglas KMJ, Pace AV, Treharne GJ, Saratzis A, Nightingale P, Erb N, Bankd MJ, Kitas GD (2005) Excess recurrent cardiac events in rheumatoid arthritis patients with acute coronary syndrome. *Ann Rheum Dis* 65:348–353.
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**SHAYX AHMAD TAROZIYNING “FUNUN UL-BALOG’A” ASARI
TUZILISHI VA G’OYAVIY MUNDARIJASI (DEVIN DE UISNING
TADQIQOTI ASOSIDA)**

*Muhiddinova Manzura Nuriddin qizi
ToshDO’TAU 1-bosqich magistranti*

Annotatsiya: Ushbu maqolada Temuriylar davri aruzshunosligiga doir „Funun ul-balog’a” risolasi tuzilishi hamda mazmuni AQSH dagi Indiana universiteti professori, sharqshunos olimi Devin de Uisning tadqiqoti asosida qisqacha tahlil qilingan.

Kalit so’zlar: XV asr qo’lyozmasi, turkiy risola, aruz janri, fan.

Abstract: In this article, the structure and content of the treatise "Funun al-Balaghah" on the dream science of the Timurid era is briefly analyzed based on the research of Devin de Wees, a professor of the Indiana University in the USA, and an oriental scholar.

Key words: XV century manuscript, Turkish treatise, aruz genre, fann.

Аннотация: В данной статье на основе исследований Девина де Виса, профессора Индианского университета в США, и восточного ученого кратко анализируются структура и содержание трактата «Фунун аль-Балага» о науке о сновидениях эпохи Тимуридов. ученый.

Ключевые слова: Рукопись XV века, турецкий трактат, жанр аруз, фанн.

XV asrning birinchi yarmida Ulug’bek hukmronligi davrida O’rta Osiyoda fan, madaniyat va san’at rivojlanib, misli ko’rilmagan kashfiyotlar qilingani tarixdan ma’lum. Shuningdek, ushbu davrda turkiy adabiyot ham ravnaq topib, adabiyotning turli sohalariga oid bir qancha ilmiy hamda badiiy asarlar yaratilgan. Bu asarlardan biri XV asr aruz janrining noyob namunasi bo’lgan Shayx Ahmad Taroziyning “Funun ul-balog’a” asaridir.

Asar XV asr Markaziy Osiyo adabiy va madaniy taraqqiyoti haqida qimmatli ma’lumot beruvchi nodir namuna ekanligi bois G’arb sharqshunos olimlarining diqqatiga sazovor bo’lgan. Bulardan biri AQSHdagi Indiana universiteti professori, sharqshunos olimi Devin de Uis bo’lib, asar tahliliga bag’ishlangan „The Predecessors of Nava’I in the „Funun al-balaghah” of Shaykh Ahmad b.Khudaydad Tarazi: neglected source on Central Asian literary culture from the fifteenth century” („Navoiyning salafлари Shayx Ahmad ibn Xudoydod Taroziyning

asarida:XV asrdan buyon Markaziy Osiyo madaniyatshunosligida unutilgan manba”) nomli tadqiqoti shular jumlasidandir.¹

Devin de Uis tadqiqotidan yetmish yil oldin qo’lyozma Herman Ete tomonidan Bodlian kutubxonasidagi islom qo’lyozmalari katalogining ikkinchi jildida qisqacha tasvirlangan² Ete asar muallifini, uning ikki nomini hamda Ulug’bekka bag’ishlangani, nusxa ko’chirilgan sana va ko’chiruvchining ismini qayd etgan, lekin u asar yozilgan sanani ko’rsata olmagan bo’lsa-da, u uni ritorik va metrik san’at, prosodiya va she’riyatning turli sohalariga oid juda qiziqarli asar sifatida ta’riflab, “turkiy va fors misralari bilan aralashib ketganini “ ta’kidlab, uning tuzilishini belgilab beradi. Asarning qiziqarli va kerakli ekanligi Ete tomonidan tasdiqlangan bo’lishiga qaramay, yetmish to’qqiz yil davomida olimlar e’tiborini tortmagan.Faqqatgina , H.F.Xofmanning Chig’atoy adabiyoti bo’yicha tadqiqotida qisqacha eslatib o’tilgan³

Devin de Uis tadqiqot ishida dastlab, asar haqida umumiy ma’lumotlar bergan bo’lib, risolani Temuriylar davrida yozilgani va ushbu davrga oid qimmatli ma’lumotlarni beruvchi manba sifatida baholaydi.Tadqiqot bir necha fasllarga ajratilgan bo’lib,,The Manuscript, the Author, the Work” („Qo’lyozma, muallif va ijod”) faslida asarning Oksfordda Bodlian kutubxonasida Eliott 127 shelf belgisi ostida saqlanayotgani va u har bir sahifasi 14 qatordan iborat 139 varoqdan iborat ekanligi haqida ma’lumot berilgan. Bundan tashqari asar o’z davrining Mir K.l.n.ki al-Hajji nomi bilan mashhur kotibi (Ete uni hech qanday izohlarsiz „Mir Kulunki”deb o’qigan) tomonidan hijriy 989, milodiy 1581-yilda Buxoroda ko’chirilgani hamda asarning qismlari haqida ma’lumotlar mavjud

¹ Devin deWEES. The Predecessors of Nava’i in the “Funun al-balaghah”of shaykh Ahmad Khudaydad Tarazi: a neglected source on Central Asian literary culture from the fifteenth century /Journal of Turkish studies, edited by Sinasi Tekin, 2005, Volume 29-.P. 73-163.

2

Catalogue of the Persian, Turkish, Hindustani and Pushtu Manuscripts in the Bodleian Library, Part II: Turkish, Hindustani, Pushtu and Additional Persian Manuscripts, ed. Hermann Ethé (Oxford: The Clarendon Press, 1930), col. 1225, No. 2170. See the brief comments on the Bodleian collection in the fourth installment of Professor Bimbaum's survey of Turkic manuscript cataloguing (Eleazar Birnbaum, "Turkish Manuscripts: Cataloguing Since 1960 and Manuscripts Still Uncatalogued," Part 4: Hungary, Czechoslovakia, Poland, Great Britain, Ireland, The Netherlands, Belgium, France, Germany, Switzerland, Austria, Italy, Finland, United States, Canada," Journal of the American Oriental Society, 104/2 [1984], pp. 303-314 [p. 306]).

³ H. F. Hofman, Turkish Literature: A Bio-Bibliographical Survey; Section III (Chaghatai), Part I (Authors) (Utrecht, 1969), VI, p. 36, s.v. "Tarazi +" Hofman's entry simply abbreviates the catalogue description and adds no additional references. Neither Tarazi nor his work is mentioned, however, in Mehmed Fuad Koprillit's article on Chaghatai literature, which served as a prime organizational source for Hofman's survey ("Gagatay Edebiyatı," Islam Ansiklopedisi, vol. 3 [1945], pp. 270-323); elsewhere, indeed. Koprild affirmed that the treatises of Nava'i and Babur on poetics (see below) were the earliest works on this subject in Chaghatai (M. Fuad Kdprilt, "Arzd," elem Ansiklopedist, vol. | [1950], pp. 625-653 [p. 653, bibliography]), making it clear that he had not taken note of the Funan al-balaghak's description in the Bodleian catalogue.

bo'lib, asarning qismlari fan deb nomlanishini yozgan. Ushbu asarning fanlari quyidagilar:

Avvalg'i fanda she'ning aqsoyin va anvoyin sharh qilur

Ikkinchi fanda qofiya va radifning qavoyidin bayon aylar.

Uchunchi fanda so'zning badoyin va sanoyin zikr etar

To'rtinchi fanda she'ning taqti va avzonin taqrir qilur

Beshinchi fanda muammoning usul va arkonin tahrir etur.

Muallif to'rtinchi fanning oxirgi qismi hamda beshinchi ya'ni muammoga bag'ishlangan fan yo'qligi haqida ma'lumot bergan..Bundan tashqari, tadqiqotning bu faslida asarning o'rganilishi, ilmiy ahamiyati va badiiy qimmatini atroflicha yoritib bergan.

Ishning qisqacha mazmuni deya nomlangan faslida esa asarning tarkibiy tuzilishi haqida ma'lumotlar mavjud bo'lib, asar turkiy tilda „debocha“ nomi bilan mashhur bo'lgan kirish qismining eng qadimgi va eng keng namunalaridan biri bilan boshlanadi. Debocha Taroziyning Olloh va payg'ambarga hamdu sanolari, asarning yaratilish sababi haqidagi hikoyasi va homiysi Ulug'bek maqtovidan iboratdir. Quyida debochadan iqtibos keltirilgan:

Hamdu sanoekim, vahmning bodpoyi sonsiz yillar yugursa, aning ibtidosining sarhadig'a kela bilmagay va shukru siposkim, fahmning semurg'ig'a adadsiz umrlar uchsa, aning intihosining doirasig'a eta olmagay; ul zuljalolning hazratig'akim, azal subhinda inoyat me'mori birla insho quvvatin va imlo qudratin taqte'vu tavsīm aylab, bani odamning xotirinda ta'biya qildi, to nazm gavhari va nasr javhari zuhurg'a kelgay va karomat nuri birla aql chirog'in yondurub, insonning vujudinda qo'ydi, to zalolat zulmotindan hidoyat lama'otiga intiqol qilg'ay va zehn xurdadoyin muammokushoyi mushkulot etti, to sinoat quvvati va istidrok qudrati birla hall va dark aylag'ay va ta'b (2a) kemasin tafakkur daryosinda g'avvos ayladi, to maoni lu'lusin nutq tori birla bahr qa'ridin avroq sohilig'a kelturgay. Va balog'at shakkaristonin anvoyi sanoe' birla majalle qildi, to notiqa to'tisi parvarish topqay va fasohat gulistonin alvoni baloe' birla tazyin etti, to til bulbuli og'iz qafasi ichinda navog'a kelgay. Nazm:

Gar badi gavhari va royi suxan,

On furud omadi ba joyi suxan.

Mazmuni:

So'z gavhari yomon va ulug'vormi,

U so'z oliy maqom bo'lib tushdi.

Fi na'ti-r-rasul a'layhi-s-salotu va-t-taxiyoti tayyiboti farovonu durudi begaron ul mehtari olamg'avu behtarini Odamg'avu ul sayyidi Rasul va hodiyyi sabil, mufaxxari koinot va xulosayi mavjudotu shahsuvori maydoni balog'at va bulbuli bo'stoni fasohat,

sufiyi suffai safohat, ya'ni Muhammad Mustafu sallallohu alayhi vassallam va alo olihi at-tayyibin va xulfoyi-r-roshidin va ashobihi at tobe'in . Nazm:

*Dar na'ti u zaboni fasohat kujo rasad?
Xud peshi oftob che partaviho dehad!⁴*

Olohgga hamd va payg'ambar s.a.v ga salovotdan so'ng muallif asar yozish sababini sabab-I ta'lif sarlavhasi bilan belgilaydi.

Asarning umumiy tuzilishi quyidagicha:

Fan 1: birinchi fan (f.48-25b), „She'riyat turlari bo'yicha, har bir turning asosiy xarakteristikalarini va kategoriyalarini tushuntirish bilan, tarkibiy va funksional nuqtai nazardan, she'riy kompozitsiyasining muhim terminologiyasini kiritadi. Taroziy dastlab, she'rning o'n turini-qasida, g'azal, qit'a, ruboiy, masnaviy, tarji, musammam, mustazod, mutatavvil va fard tartibida sanab o'tadi va so'ng ularga nisbatan qo'llanilgan turli funksional atamalarga qisqacha to'xtalib o'tadi. Har biri „nav“ tarzida batafsilroq tushuntirib o'tiladi.

Fan 2: ikkinchi fan (ff.26a-40b) qofiya bilan bog'liq bo'lib, muallif uni baytning asosiy va belgilovchi xususiyati sifatida tavsiflaydi:Ushbu bo'lim asardagi eng uzun nasriy izohli parchalarni o'z ichiga oladi va turkiy tilda qofiya haqida boshqa qofiyaga oid muhokamalar yo'qligi sababli alohida qiziqish uyg'otadi.

Fan 3: uchinchi fan (40b-76a) “fi's-san'at ash-shi'r” sarlavhasiga ega bo'lib, she'r va nasrda qo'llaniladigan badiiy vositalar yoki ritorik figuralar bilan bog'liq; ikkinchisi singari, bu fan ham boshqa turkiy tillarda qiyosiy antik davr poetikasiga oid asarlarda ko'rib chiqilmagan mavzuga bag'ishlangan bo'lib, keng nasriy tushuntirishlari bilan alohida qiziqish uyg'otadi. Taroziy bu bobda yuzga yaqin badiiy san'atlarni tahlil va tavsif qilgan.

Fan 4: to'rtinchi fan(ff. 76b-139a, chap to'liq emas) “fi avzan ash ash-she'r” sarlavhasi ostida bo'lib, aruz bilan bog'liq. U kengaytirilgan nasr bo'limi bilan boshlanadi- asardagi eng uzun parcha (13 varoq bo'lib, 3 varog'i metrik jadvallar tashkil qiladi) aruz tizimini tanishtirishga xizmat qilgan.Bu fan ahunday boshlanadi:

Bilgilkim, arab ulamosining ittifoqi birla bahr o'n olti kelibtur. Ajam ulamosi so'ngra oriy turub, yigirma to'rt qilibturlar. Faammo, bu zaif tiladikim, ul azizlarning paydo qilg'an bahrlarini qalamg'a keltursa va turkiy iborat birla bayon aylab, har vazng'a turkiy bayttin misol keltursa.

Bu havastin ko'p nusxalarni mutolaa qildiq, netokkim "Aruzi Qustos" va "Aruzi Andalusiy" va "Me'yoru-l-ash'or" va bu tariqa nusxalarning bahrlarinda ko'p g'avvosliq qildiq. Ersa mulohaza andog' tushtikim, bu ilmda ulamo ixtilofi base

⁴ Shayx Ahmad Xudoydod Taroziy “Funun ul- balog'a”ff 1b- 2a

qilibturlar. Ba'zilar o'ksutubturlar. Va ul qoidalar kim, ulamoyi salaf qo'yubturlar, alarning qoidasi birla amal qilsalar, o'n olti bahr paydo bo'lurg'a maqduri bor. Ul sababtin bu zaif ham andog' ixtiyor qildikim, bu bahrlarg'a avval o'n olti bahrkim, mumkinu-l-vujudtur, izofat qilib, tamomin qirq bahr uza muqarrar aylab va ul o'n olti bahrkim, mutaqaddimlar tarkib qilibturlar, burun oni ko'rguzub, ondin so'ngra mutaaxxirlar paydo qilg'anni, taqi.

Emdi ziyoda bo'lg'an bahrlarni(ng) barchani bir silk uzra tortib, musharrax va munaqqah bayon aylab va bu qirq bahrdin nechasi xosdur va necha bahrning asli zihoftin qo'por va har bahrning mushtarak sho'basini nechadur va xos sho'basini qaysidur majmu'ini sobit qilib, sharh qilsakim, barchasi o'qug'an kishilarga ma'lum bo'lsa. Va billohu-l-avn va-t-tavfiq⁵

Yuqorida ta'kidlanganidek asarning beshinchi qismi mavjud emas.

Qolaversa, bu asarda o'sha davrning mashhur shoirlari va ularning asarlari haqida qimmatli ma'lumotlar mavjud bo'lib, asarning ilmiy hamda badiiy qimmatini aruzshunoslikning temuriylar davrida yuksak taraqqiy etganini namoyon etadi.

Xulosa qilib aytganda, Shayx Ahmad Xudoydod Taroziy o'z davrining qomusiy shoiri bo'lib, uning asari adabiyotimiz uchun muhim topilma hisoblanadi. Noyob ilmiy qo'llanma bo'lmish bu asarni yanada kengroq tahlil etish va bu asarga oid G'arb davlat olimlarining tadqiqotlari bilan tanishib, ular orqali asar haqida batafsilroq ma'lumotga ega bo'lishimiz va keyingi ilmiy izlanishlarimizda bu asar haqida yanada to'liq ma'lumotga ega bo'lib, uni har bir qismini mukammal tahlil etishimiz oldimizda turgan eng muhim vazifalardan biridir.

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⁵ Shayx Ahmad Xudoydod Taroziy "Funun ul- balog'a" ff 76b-77a

ОСОБЕННОСТИ ПОЛИМОРФИЗМА ГЕНА ФАКТОРА НЕКРОЗА ОПУХОЛИ TNF- α (rs1800629) ПРИ АУТОИММУННОЙ ГЕМОЛИТИЧЕСКОЙ АНЕМИИ

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Введение. На сегодня известно, что в механизмах формирования патологий человека, в том числе и аутоиммунной гемолитической анемии (АИГА), важная роль принадлежит полиморфным генам, регулирующие в организме сложные процессы приводя к развитию заболевания [2,3]. Особое внимание исследователей уделяется изучению степени участия полиморфных локусов генов TNF- α (rs1800629) в патогенезе АИГА [5,7].

Фактор некроза опухоли (TNF) известный также как кахексин (кахектин) представляет собой адипокин и цитокин, состоит из различных трансмембранных белков с гомологичным доменом TNF [3].

Основная роль TNF заключается в регуляции иммунных клеток [10] и нарушение регуляции его выработки TNF связано с целым рядом заболеваний человека [1,4,6], в том числе и АИГА [8,9].

Цель. Изучить особенности полиморфизма гена фактора некроза опухоли TNF- α (rs1800629) при аутоиммунной гемолитической анемии.

Материал и методы. Молекулярно-генетический анализ полиморфизма TNF- α (rs1800629) проведен у 93 (медиана возраста 41,2 \pm 3,9 лет) пациентов с диагнозом АИГА, составившая основную группу больных. Эта группа разделена распределена на две группы больных с нетяжелым (n=49) и тяжелым течением АИГА (n=38).

Все больные наблюдались в республиканском специализированном научно-практическом медицинском центре Гематологии (г. Ташкент) в период с 2018 по 2022 гг. Контрольную группу составило 97 здоровых доноров, не имевшие в анамнезе аутоиммунных заболеваний, соответствовавшие по полу и возрасту с основной группой больных.

Детекция полиморфизма TNF- α (rs1800629) проводилась методом стандартной ПЦР с использованием тест-систем компании «Литех» (Россия) на программируемом термоциклере фирмы «Applied Biosystems» 2720 (США). Статистический анализ результатов проведен с использованием пакета статистических программ «OpenEpi, Version 2.3». Степень участия полиморфных локусов цитокинового гена фактора некроза опухоли TNF- α

(rs1800629) в формировании АИГА нами оценивалась по определению критериев Фишера (χ^2), достоверности значений (P), шанса развития (OR) и доверительного интервала (ДИ).

Результаты. Анализ соответствия наблюдаемых и ожидаемых генотипических частот гена TNF- α (rs1800629) соответствовало при РХВ в группах больных и здоровых ($P>0.05$).

В основной группе больных с АИГА частота неблагоприятного аллеля А оказалась выше аналогичной среди здоровых в 1.6 раза (10.2% против 6.7%; $\chi^2=1.5$; $P=0.3$; $OR=1.6$; ДИ: 0.76-3.29) не достигая статистически достоверного уровня. В то же время со стороны частоты генотипа G/A хотя и не выраженная, но все же наблюдалась тенденция к ее увеличению по сравнению со здоровыми в 1.7 раза (20.4% против 13.4%; $\chi^2=1.7$; $P=0.2$; $OR=1.7$; ДИ: 0.77-3.57) соответственно.

Со стороны частот благоприятных аллеля (G: 89.8% против 93.3%; $\chi^2=1.5$; $P=0.3$; $OR=0.6$; ДИ: 0.3-1.31) и генотипа (G/G: 79.6% против 86.6%; $\chi^2=1.7$; $P=0.32$; $OR=0.6$; ДИ: 0.28-1.3) между двумя группами не определялись статистически значимые различия.

Наличие тенденции к повышению частоты гетерозиготы ($\chi^2=1.7$; $P=0.2$) по цитокиновому гену фактора некроза опухоли TNF- α (rs1800629) в основной группе больных с АИГА по сравнению со здоровыми свидетельствует о возможном его участии в механизмах формирования этой патологии в Узбекистане.

По цитокиновому гену фактора некроза опухоли TNF- α (rs1800629) группе больных со среднетяжелым течением АИГА в распределении благоприятных и неблагоприятных вариантов аллелей (G: 93.6% против 93.3%; $\chi^2<3.84$; $P=0.95$; $OR=1.1$; ДИ: 0.41-2.73 и А: 6.4% против 6.7%; $\chi^2<3.84$; $P=0.95$; $OR=1.1$; ДИ: 0.37-2.45) и генотипов по сравнению к аналогичным в здоровой группе не обнаружено статистических значимых различий (G/G: 87.3% против 86.6%; $\chi^2<3.84$; $P=0.95$; $OR=1.1$; ДИ: 0.4-2.84 и G/A: 12.7% против 13.4%; $\chi^2<3.84$; $P=0.95$; $OR=0.9$; ДИ: 0.35-2.52).

Полученные результаты, показывают отсутствие участия аллельных и генотипических частот полиморфного гена фактора некроза опухоли TNF- α (rs1800629) в механизмах реализации не тяжелого течения АИГА в Узбекистане.

Однако, в отношении риска формирования тяжелого течения АИГА установлена ассоциация с полиморфными локусами цитокинового гена фактора некроза опухоли TNF- α (rs1800629). Это доказывало наличие статистически достоверных различий в повышении неблагоприятных аллеля А в 2.6 раза (15.8% против 6.7%; $\chi^2=5.4$; $P=0.03$; $OR=2.6$; ДИ: 1.16-5.88) и генотипа G/A в 3.0 раза (31.6% против 13.4%; $\chi^2=6.0$; $P=0.03$; $OR=3.0$; ДИ: 1.24-7.16) по изученному гену

в группе больных с тяжелым течением АИГА по сравнению с их частотами в здоровой группе.

Таким образом, полученные данные свидетельствуют о статистически достоверном повышении риска формирования тяжелого течения АИГА у носителей ослабленного аллеля А и гетерозиготы G/A в 2.6 ($\chi^2=5.4$; P=0.03) и 3.0 ($\chi^2=6.0$; P=0.03) раза соответственно, и, показывают их самостоятельный вклад в повышении шанса утяжеления течения АИГА в Узбекистане.

Более того, достоверно значимые различия в распределении полиморфных локусов цитокинового гена фактора некроза опухоли TNF- α (rs1800629) установлен и между группами больных с не тяжелым и тяжелым течением АИГА. Так, риск формирования тяжелого течения АИГА при носительстве неблагоприятных аллеля А статистически достоверно оказался выше в 2.8 раза (А: 6.4% против 15.8%; $\chi^2=4.4$; P=0.05; OR=2.8; ДИ: 1.06-7.16) и гетерозиготы (G/A: 12.7% против 31.6%; $\chi^2=4.9$; P=0.05; OR=3.2; ДИ: 1.14-8.77).

Таким образом, анализируя распределение полиморфных локусов цитокинового гена фактора некроза опухоли TNF- α (rs1800629) среди обследованных больных основной группы АИГА и здоровых установлено не выраженная тенденция к повышению риска формирования АИГА среди носителей гетерозиготы ($\chi^2=1.7$; P=0.2).

Помимо этого, установлено отсутствие участия аллельных и генотипических частот полиморфного гена фактора некроза опухоли TNF- α (rs1800629) в механизмах реализации не тяжелого течения АИГА в Узбекистане. Тогда, как в отношении повышении риска формирования тяжелого течения АИГА по сравнению со здоровыми и больными с не тяжелым течением АИГА установлена статистически достоверная ассоциация с носительством ослабленного аллеля А ($\chi^2=5.4$; P=0.03 и $\chi^2=4.4$; P=0.05) и гетерозиготы G/A ($\chi^2=6.0$; P=0.03 и $\chi^2=4.9$; P=0.05) соответственно.

Вывод. Анализируя результаты, по изучению особенностей полиморфизма гена TNF- α (rs1800629) среди изученных групп больных с АИГА, выявлено возможное участие изученного полиморфизма в повышении риска формирования АИГА и тяжелого его течения в Узбекистане.

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**INGLIZ TILI DARSLARIDA TINGLAB TUSHUNISH
KO'NIKMASINI O'QITISH YUZASIDAN KELIB CHIQUADIGAN
QIYINCHILIKLAR VA METODLAR**

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Annotatsiya: Ushbu maqolada ingliz tilining tinglab tushunish ko'nikmasini rivojlantirishda o'rganuvchilar duch keladigan qiyinchiliklari yuzasidan izlanishlar olib borilganligi natijalari tahlil qilinadi. Bundan tashqari bunday muammolarni yengish usullari haqida fikr yuritiladi.

Kalit so'zlar: Nutq, ekstralingvistik, lingvistik, psixologik, audio matn, tinglab tushunish.

**DIFFICULTIES AND METHODS OF ENHANCING THE TEACHING
LISTENING SKILLS IN ENGLISH CLASSES**

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Abstract: This article is devoted to the analysis of the difficulties faced by learners in the development of listening comprehension skills of the English language. Theoretical data about the analysis of the difficulties and teaching methods are discussed and analyzed with reasonable examples.

Key words: Speech, extralinguistic, linguistic, psychological, audio text, listening comprehension.

Til insoniyat muloqotining asosiy mezoni bo'lib, turlicha ma'no va hissiyotlarni ifodalash uchun ishlatiladigan tovushlar va so'zlar yig'indisidir. Tilning turli sohalari bo'yicha o'rganilgan tadqiqotlar shuni ko'rsatadiki, til o'rganish g'oyatda murakkab jarayon bo'lib, inson ongiga, avvalo, tinglash, so'ng uni muloqot sifatida chiqarish, so'ngra o'qish orqali yanada rivojlantirish va oxirida uni matn holiga keltirib mustahkamlashni talab etadi. Texnologiya, tilshunoslik va pedagogikaning rivojlanib borishi til o'rgatish va o'rganish jarayonlarining yanada mukammallashib borishiga zamin yaratdi. Inson zoti bir-biri bilan doimiy ravishda kundalik muloqotni amalga oshirar ekan, tinglash orqali ikkinchi suhbatdoshining nutqini anglab olishga harakat qiladi. Nutqni tinglab tushunish deganda, ovozli nutq (gapirish) chog'ida quloq solish, idrok etish va fahmlash anglanadi. Umuman „nutq“ deganda gapirish, tinglab tushunish, o'qib tushunish va yozuv tushuniladi. Aslida „gapirishni tinglab tushunish“ degan ma'qulroq¹.

Demak, tinglab tushunish jarayoni pedagogik nuqtai nazardan til o'rgatishning asosiy mezoni ekan. Maqolamizda ingliz tili darslari davomida o'quvchilarda tinglab tushunish kompetensiyasini rivojlantirishda yuzaga keladigan qiyinchiliklar va ularni

¹ J. Jalolov-“ Chet tilini o'qitish metodikasi”, Toshkent, 2012, 219-bet

yengib o'tishga doir bir qancha usullar tahlil qilinadi. Tinglab tushunish tashqi muhitdan kelayotgan ma'lumotlarni ong orqali idrok qila olish qobiliyatidir. Bu esa chet tili ya'ni biz ko'rib chiqmoqchi bo'lgan ingliz tilida har qanday ma'lumotni eshitib so'ngra anglab olishdir. Tinglab tushunish jarayonida o'quvchi yoshlar bir qancha muammolarga duch kelishadi. Taniqli olim I.Yoqubov tinglab tushunishda yuzaga keladigan qiyinchiliklarni 3 turda tavsiflab bergan. Ular:

- 1.Ekstralingvistik
- 2.Lingvistik
- 3.Psixologik²

Ushbu ta'rifdan kelib chiqib yuqoridagi qiyinchiliklarning yuzaga kelish sabablarini o'ylab ko'ramiz. Avvalo, **ekstralingvistik qiyinchiliklar** tarkibiga tinglash jarayonining muhiti, darsda ishtirok etayotgan o'quvchilar soni, audio materiallar sifati, nutqning tezligi yoki sekinligi, nutq intonatsiyasi, tovush temblari, bajarilayotgan vazifaning tushunarligi kabilar kiradi. **Lingvistik qiyinchiliklar** esa o'z navbatida tilning grammatik jihatlari bilan bog'liq bo'ladi. Ular sirasiga fonetik (tovushlarni farqlash), morfologik (so'zlarning yasashini tahlil qila olmaslik), sintaktik (so'zlarni to'ri qo'llash ularni bog'lash) va boshqa qiyinchiliklar misol bo'ladi. **Psixologik qiyinchiliklar** esa o'rganuvchining psixikasi bilan bog'liq bo'ladi. Misol uchun, bolaning xarakter tipi ham bunga misol bo'ladi. Ba'zi bolalar eshitishdan ko'ra ko'rib yoki ushlab bajarishni afzal ko'radi va aynan mana shu sabab unda tinglab tushunish kompetensiyasini rivojlantirishga to'sqinlik qiladi. Boshqa olim J.Jalolov tinglab tushunishda yuzaga keladigan qiyinchiliklarni boshqacha usulda ta'riflab bergan. Ular:

1. Tilga oid shakliy qiyinchiliklar;
2. Mazmunga oid qiyinchiliklar;
3. Nutqiy idrok qilishning shart sharoitlariga oid qiyinchiliklar;
4. Nutq shakliga oid qiyinchiliklar;
5. Tilshunoslik nuqtai nazaridan sodir bo'ladigan qiyinchiliklar;³

Ushbu ta'riflarning tub ma'nosiga e'tibor qaratadigan bo'lsak, tinglab tushunish jarayonida yuzaga keladigan asosiy muammolar shaxsning o'ziga, vaziyatiga va jarayondagi holatiga bog'liqdir. Ammo asosiy muammolar tilning grammatik jihatlarni bilmaslik va ularni qo'llay olmaslik yuzasidan paydo bo'lar ekan. Ana shunday jihatlarni bartaraf etishning turli usullari, va ularga eltuvchi turli metodlar olimlar tomonidan ishlangan va ulardan to'g'ri foydalana olish dars jarayonida bolada tinglab tushunish bilan bog'liq muammolarni yengishga asos bo'la oladi. Faoliyatim davomida o'zim tajriba sifatida o'rgangan asosiy usullardan biri o'quvchi yoshlarga har darsda xorijiy tilda yozilgan podcastlar, video materiallar yoki shunchaki warming up (boshlash) qismida biror bir darsga aloqador qo'shiqlar qo'yish orqali ularning tinglash jarayoniga eshitishlarini moslashtirish so'ngra asosiy mavzuga oid listening activity lar bajartirishdan iborat. O'quvchi tinglash jarayoniga moslashar ekan, menimcha, o'tiladigan mavzu nima bo'lishidan qat'iy nazar listening tasklar unga bog'liq ravishda tashkil etilishi kerak. Misol uchun grammatika yuzasidan sifat mavzusi o'tilsa, listening taskda note completion (bo'sh o'rinlarni to'ldirish) yoki

² Z. No'monova, G. O'rinboeva- Til o'rganishda (listening) tinglab tushunish qobiliyatini rivojlantirishning qulay usuli (ingliz tili misolida)

³ J.Jalolov-“ Chet tilini o'qitish metodikasi”, Toshkent, 2012, 219-bet

matching(moslashtirish) kabi vazifalardan foydalanish mumkin. Ushbu fikrlarimiz isboti tariqasida ingliz tilida nutqni tinglab tushunishni o'rgatishni 2 xil usuli mavjud.⁴

a)Tayyorlov bosqichi b)Asosiy bosqich

Tayyorlov bosqichida o'qituvchi tinglab tushunish uchun mavzu tayyorlaydi va u asosida nutqni,matnni tayyorlaydi. Matn to'liq analiz qilinadi,jumladan, yangi so'zlar,grammatik qoidalar,tovushlar o'rganiladi. Matn mazmuni to'liq tahlil qilinadi.

Asosiy bosqichda mavzu asosida mazmunli,davomli notanish monologik ,dialogik nutqni tinglab tushunish,taqlid qilish,malaka ko'nikmalarini shakllantirish ko'rib chiqiladi. Ushbu bosqich quyidagi ketma ketlikda sodir bo'ladi.

1. Tinglab tushunishni (listening)o'tkazishga tayyorlanish;

Ya'ni ushbu jarayonda o'qituvchi kerakli bo'lgan barcha jihozlarni tayyorlashi,o'quvchining matnning og'zaki shaklini eshitishga avvaldan tayyorlanib olinganligi, uning ushbu vazifa bilan qanchalik tanishligi kabi masalalarga e'tibor qilinadi.

2. Tinglab tushunish jarayonini o'tkazish;

Bu holatda o'quvchi faqatgina o'ziga berilgan matnning audio shaklini eshitadi, uni analiz qiladi,nima demoqchi ekanligini tushunishga harakat qiladi. Bunday usullar orqali listening ko'nikmasini rivojlantirish o'quvchida boshqa ko'nikmalar yuzasidan ham bilimlarini mustahkamlab borishiga zamin yaratadi.

Bugun biz axborot rivojlangan bir davrda yashayapmiz. Ilm olish uni chuqur egallash,xususan, maqolamizda keltirilgan o'zga tilning bir qismini o'rganish ham katta mahorat talab qiladi. Tinglab tushunish biz yaratadigan nutqimizning bir bo'lagidir. Uni yuqorida keltirilgan qiyinchiliklari doirasida tahlil qilib,berilgan usullar bo'yivha o'rgatib borilsa, maqsadga muvofiq bo'ladi deb o'ylayman.

Foydalanilgan adabiyotlar ro'yxati:

1. Hoshimov O`, Yokubov I. Ingliz tili o`qitish metodikasi, Toshkent, 2003-yil
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⁴ Hoshimov O`, Yokubov I. Ingliz tili o`qitish metodikasi, Toshkent, 2003-yil, 131-bet

WEB-SAHIFADA MATN JOYLASHTIRISH VA ULARNI BOSHQARISH. LINK JOYLASHTIRISH.

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Samarqand viloyati Payariq tumani 23-maktab

Informatika va Axborot Texnologiyalari fani o'qituvchisi

Annotatsiya. Ushbu maqola veb-sahifalarda matnni samarali joylashtirish va boshqarishning muhim jihatlarini o'rganadi. Axborot asosan internetda iste'mol qilinadigan bugungi raqamli asrda matn tarkibini taqdim etishni optimallashtirish foydalanuvchini jalb qilish va qoniqish uchun juda muhimdir. Maqolada veb-sahifalarning o'qilishi va qulayligini oshirish uchun turli xil strategiyalar, shu jumladan havolalarni joylashtirish kiradi.

Kalit so'zlar: Matnni joylashtirish, veb-sahifalarni boshqarish, havolani joylashtirish, foydalanuvchini jalb qilish, o'qish, qulaylik, tarkibni optimallashtirish.

Internetning dinamik landshaftida yaxshi tuzilgan va foydalanuvchilarga qulay veb-sahifa tashrif buyuruvchilarni jalb qilish va saqlash uchun juda muhimdir. Ushbu maqola matnni joylashtirishning nozik san'atiga kirib, umumiy foydalanuvchi tajribasini yaxshilash uchun ko'priklarning strategik qo'shilishini ta'kidlaydi.

Mavjud adabiyotlarni tushunish samarali strategiyalarni ishlab chiqish uchun juda muhimdir. Oldingi tadqiqotlar veb-sahifalarda aniq va aniq tarkibni taqdim etishning muhimligini ta'kidladi. Bundan tashqari, matn ichidagi havolalarni joylashtirish foydalanuvchi navigatsiyasi va o'zaro ta'siriga ta'sir qiluvchi asosiy omil sifatida aniqlandi.

Matnni joylashtirish va havolalarni birlashtirishning maqbul usullarini o'rganish uchun biz muvaffaqiyatli veb-saytlarni har tomonlama tahlil qildik. Bu yuqori foydalanuvchi ishtiroki va past chiqish tezligi bilan mashhur bo'lgan sahifalarda tartib, formatlash va giperhavola joylashtirishni o'rganishni o'z ichiga olgan.

Matnni veb-sahifaga joylashtirish va uni boshqarish uchun siz odatda struktura va tarkib uchun HTML (Hypertext Markup Language) va uslublar uchun CSS (kaskadli uslublar jadvallari) dan foydalanasiz. Bundan tashqari, agar siz havolalar qo'shmoqchi bo'lsangiz, htmlda `` (langar) elementidan foydalanasiz.

Matn va havolalar bilan veb-sahifani qanday tuzishingiz mumkinligi haqida oddiy misol:

1. HTML faylini yarating:

A `bilan yangi fayl yarating.html 'kengaytmasi (masalan,' indeks.html') va uni matn muharririda oching.

2. HTML tuzilishi:

HTML hujjatingizning asosiy tuzilishini aniqlang.

```
""html
<!DOCTYPE html>
< html lang="uz">
< head>
  < meta charset="UTF-8">
  < huzur name=" ko'rish "kontent = " kenglik = qurilma kengligi, boshlang'ich
o'lchov=1.0">
  < title > veb-sahifangiz sarlavhasi< / title>
  < link rel= "uslublar jadvali" href= " uslublar.css">
< / head>
< tanasi>
  <!-- Sizning kontentingiz bu erda - >
< / body>
< / html>
""
```

3. Matn Tarkibini Qo'shing:

'<Body > ' yorlig'i ichiga matn tarkibini turli HTML elementlari yordamida qo'shing, masalan paragraflar uchun `<p>`, sarlavhalar uchun `<h1>` va hokazo.

```
""html
< tanasi>
  < h1>mening veb-sahifamga xush kelibsiz< / h1>
  <p > bu matn tarkibiga ega veb-sahifaning namunasi.< / p>
  <p>matningizni shu yerda boshqarishingiz va tartibga solishingiz mumkin.<
/ p>
< / body>
""
```

4. Havolalarni Qo'shing:

Havolalarni qo'shish uchun ` < a > ` (langar) elementidan foydalaning. Bog'lamoqchi bo'lgan URL manziliga 'href' atributini o'rnating.

```
""html
< tanasi>
  < h1>mening veb-sahifamga xush kelibsiz< / h1>
  <p > bu matn tarkibiga ega veb-sahifaning namunasi.< / p>
  <p>matningizni shu yerda boshqarishingiz va tartibga solishingiz mumkin.
Tashrif < a href="https://www.example.com" > misol veb-sayt</a>.< / p>
< / body>
""
```

5. CSS bilan uslub:

Alohida CSS faylini yarating (masalan, `uslublar.css`) veb-sahifangizni uslublash uchun.

```
""css
tanasi {
  shrift-oila: Arial, sans-serif;
  fon rangi: # f4f4f4;
  rang: # 333;
  chet: 20px;
}
h1 {
  rang: # 0066cc;
}

a {
  rang: # 009900;
  matn-bezatish: yo'q;
}

javob: hover {
  matnni bezatish: tagiga chizish;
}
...

```

`<Head>` bo'limidagi ``<link>`` yorlig'i yordamida HTML faylingizdagi CSS faylini bog'lang.

```
""html
< head>
  <!-- ... boshqa bosh elementlar ... -->
  < link rel= "uslublar jadvali" href= " uslublar.css">
< / head>
...

```

Bu asosiy misol, va siz ehtiyojlari asosida yanada sozlashingiz mumkin. To'ldiruvchi matn va URL manzillarini haqiqiy tarkibingiz bilan almashtirishni unutmang.

Munozara bo'limi foydalanuvchilarga yo'naltirilgan dizaynning ahamiyatini ta'kidlab, natijalarning oqibatlarini o'rganadi. U havolalarni strategik joylashtirish nafaqat navigatsiyani yaxshilashi, balki foydalanuvchilarni qo'shimcha tarkibni

o'rganishga undashi va shu bilan veb-saytga sarflanadigan umumiy vaqtni qanday oshirishi mumkinligini o'rganadi.

Xulosalar:

Xulosa qilib aytganda, veb-sahifalarda matnni samarali joylashtirish ko'p qirrali harakatdir. Tarkibdagi ko'priklardan oqilona foydalanish foydalanuvchi ishtiroki va qoniqishiga sezilarli ta'sir ko'rsatishi mumkin. Topilmalar shuni ko'rsatadiki, foydalanuvchilarga qulay dizayn va yaxshi joylashtirilgan havolalar yanada chuqurroq va yoqimli ko'rish tajribasiga hissa qo'shadi.

Ushbu sohadagi kelajakdagi tadqiqotlar matnni joylashtirish strategiyasini yanada takomillashtirish uchun sun'iy intellekt va tabiiy tilni qayta ishlash kabi rivojlanayotgan texnologiyalarning integratsiyasini o'rganishi kerak. Bundan tashqari, turli xil tarkib uzunligi va havola zichligining foydalanuvchi xatti-harakatlariga ta'sirini o'rganish qimmatli tushunchalarni berishi mumkin.

Xulosa qilib aytganda, matnni joylashtirish va havolalarni birlashtirish san'atini o'zlashtirish muammosiz va yoqimli onlayn tajribani taqdim etishni maqsad qilgan veb-ishlab chiquvchilar va kontent yaratuvchilar uchun juda muhimdir. Foydalanuvchiga yo'naltirilgan dizayn tamoyillarini qabul qilish va texnologik yutuqlardan xabardor bo'lish orqali veb-saytlar ularning dolzarbligini va doimiy rivojlanayotgan raqamli landshaftda ishtirok etishini ta'minlashi mumkin.

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