Volume 1, Issue 8, November 2023

LOGIC AND ITS SIGNIFICANCE FOR MEDICAL FIELD

ISSN (E): 2938-3803

O'rol Abilov

Professor of the Department of Social Sciences of the Tashkent Medical Academy, Doctor of Philosophy



Abstract:

First of all, it should be said that in order to make a philosophical observation, any person, regardless of his specialization, must have the ability to think logically and make the right observation along with sufficient knowledge in the field of specialization. Only then can the decision be correct, and this feature is very necessary and relevant, including in the medical field.

INTRODUCTION

Seen from this point of view, logic is the doctrine of ways of knowing nature and man. A medical professional cannot study and treat a person outside of nature.

It is known from the history of science in the field of medicine that the philosophical views of Ibn Sina, who is considered one of the world-recognized scholars of the field of medicine, are reflected in three major directions: metaphysics, logic and physics.

It is known that metaphysics - theology, illuminates the issues of the beginning, structure and composition of the world of being and existence. Physics. - natural science issues, includes all issues related to the study of bodies and matter. Logic is the art of correct thinking, studies the forms of mental cognition.

Ibn Sina divides logic into nine parts. Logic teaches the rules of thinking differently, avoiding mistakes, shows the ways to move from known knowledge to unknown knowledge and vice versa. The relation of logic to thinking is similar to the relation of grammar to speech, and the relation of poetic theory to poetry. Logic is one of the most essential sciences for any person involved in science.

Ibn Sina approves the logical rigor of proof and the essence of emotional knowledge based on the situation of the time he lived. But external principles can only be perceived directly as the first intelligence in the form of divine illumination - he believes.

It was not for nothing that logical semantics and pragmatics, modal and various systems of logic were actively developed in the world scientific field over time. Because the rapid pace of social and technological development has brought to the agenda the question of researching archaic, mythological, pralogical (a logical error that involuntarily leads a person to the wrong conclusion when the laws or rules of logic are violated in thinking), affective, figurative, visual, intuitive, creative, unconscious and other ways of thinking. and in this regard, on the basis of the development of science and technology, it has created and is bringing about the demand for changes that lead to a very logical thinking.

Focusing on the question of logic and its importance and necessity for medicine, logic, regardless of its field, is particularly noteworthy because it teaches the laws of structure and correct reasoning.

A thought form is a connection and structure of thoughts in order to express a certain content.



Volume 1, Issue 8, November 2023

Although national languages are different, they have a common structure. Any discussion can be carried out only with a subject indicating the subject of thought and a predicate expressing the sign of the subject of thought. The structure of the opinion is in the form of "S - R". The science of logic teaches the laws and rules of this structure, the method of interconnection of thoughts.

ISSN (E): 2938-3803

Logical forms (forms of thought) and their structure are different.

Logical correctness of discussions depends on adherence to important, necessary connections of thoughts (laws of thought). Otherwise, we make a logical error, a wrong judgment. These laws are taught by the science of logic. It serves as a very important basis and factor in making an accurate diagnosis for a patient in medicine.

Thanks to the science of logic, we study the structural forms of our thinking, rules of law, methods. It helps our thinking culture to grow. Knowing them will help us to avoid ambiguity, inconsistency and conflict in our judgments. Inability to logically analyze one's own and other people's opinions leads to a correct understanding of science and correct practical activity. Correct expression of opinions, correct understanding and even separation of thinking are not only necessary for direct communication. The science of logic is of great importance for the deep systematic understanding of scientific knowledge and for the development of sciences. Various concepts, discussions, and conclusions in science can develop successfully if they are consistent with the structure, rules, and law of correct thinking. We will try to explain this below with the example of medical science and the provision of medical services to the population:

The success of providing medical services to the population largely depends on the widespread introduction of medical achievements, improving the quality of diagnosis of patients. The quality of the diagnosis is not determined only by the discovery of new instrumental - technical and other methods of diagnosis. The doctor's ability to think logically plays an important role in this. Due to the use of the newest chemical-biological and technical methods of diagnosis, the amount of information about the disease is increasing, the mental activity and process of the doctor is becoming more complicated, in this respect, it is extremely necessary for the diagnosis to be correct, clear and logically based. In such conditions, the confidence that the treatment method will be highly effective depends on the accuracy of the diagnosis, and the development of medical science and medical services requires a deep mastery of the logic of a medical worker.

The great importance of elementary logic for medical diagnosis has been repeatedly emphasized by prominent medical representatives of ancient and modern times. Hippocrates praised physicians who methodically draw conclusions from events. Galen severely criticized scientists who did not know the principles of logical thinking. As a child, Ibn Sina deeply studied logic and, as we mentioned above, contributed to the development of this science to a certain extent. It is known to the whole world that logic has become an important necessity for the development of medical science.

There are many problems that need to be logically solved in theory and practical medicine. As a result of complete lack of knowledge of logic, various complications and errors in diagnosis are not decreasing. We will briefly touch on some of them.

Adherence to the law of reality in diagnostic practice requires concreteness and accuracy of concepts. In medicine, there are many such terms (terms), which often do not have a clear meaning to a certain extent, and their meaning is often changed arbitrarily. For example, widely used terms such as cardiopathy, hematopathy, undifferentiated collagenosis, diencephalic syndrome,



Volume 1, Issue 8, November 2023

dysthyroidism, general atherosclerosis, tonsillocardial syndrome, and myopathy can be given as examples. Clinical medicine's fascination with such terms makes the diagnosis abstract, vague, and nebulous. For example, at least three diseases are hidden in the diagnosis of "Tonsillocardial syndrome". They include 1) tonsillogenic neurocircular dystonia, 2) tonsillogenicmyocardiodystrophy, 3) tonsillogenic infectious-allergic myocarditis, which are similar in clinical appearance, but differ in pathogenesis, course, and consequences.

ISSN (E): 2938-3803

Or the term "chronic pneumonia" includes her looking over eighty. These and many similar terms need proper classification.

Thus, due to the diversity of word expression of certain medical concepts, the law of meaning is often violated in diagnosis, that is, one word represents different diseases, and vice versa, one disease is represented by different words. In such circumstances, it is very important to know the criminal law.

The law of conflict requires the discussion to be coherent, to eliminate conflicting, mutually exclusive opinions. "Something cannot be affirmed and denied at the same time," says Aristotle. Due to ignorance of the laws of logic, violation of the law of contradiction in medical practice is common. For example, here is an excerpt from the medical history: When referring the patient to the clinic, the attending physician writes: "The diagnosis is uncertain." On the one hand, the characteristics of the clinical course of the disease (character and period of recurrence of pain, season of exacerbation) indicate the presence of a 12-digit ulcer. On the other hand, X-rays performed 4 times by 2 radiologists during the disease outbreak did not confirm this diagnosis at all. The absence of X-ray changes in the stomach is against the presence of "chronic gastritis". The last conclusion of the radiologist: "Organic diseases of the stomach and 12th intestine were not detected. Because clinical and X-ray data did not match sharply, the patient was diagnosed with gastroduodenoscopy."

This discussion of the doctor is vague and contradictory. He both admits and denies duodenal ulcer disease. On top of that, he admits to having chronic gastritis.

In the practice of medical reasoning, we often encounter violations of the law of sufficient reason. The results of the practice of doctors, fortune-tellers, etc. are often "proved" to be compared without a real logical basis.

Violations of this law are common, especially in early diagnoses. Such cases are more common in diagnoses made on the basis of the first interview and examination with the patient. This situation is not enough for the established diagnoses. Adequate justification in the right diseases varies. In some diseases of the skin, skin and eyes, a doctor's examination can provide a sufficient basis, in others - laboratory studies are needed, in others - special complex methods of diagnosis (for example, functional biopsy in jaundice) are required.

Sometimes the syndrome is a similar pathology, and denial itself (for example, in hypertension) is a sufficient basis.

Thus, following the laws of logic leads the doctor to think correctly, to make a correct and valid diagnosis. The laws of logic apply at all stages of the doctor's discussion.

Concept is the first foundation in right thinking and right understanding. Knowledge of concept logic is essential for both scientific research and treatment. Logic requires clear content of concepts. Vague terms can hide various diseases and their symptoms.

It should be said that the landscape of many infectious diseases is changing, while the concepts of



ISSN (E): 2938-3803

various diseases taught in textbooks remain largely unchanged. Therefore, it is more important for doctors to constantly master the concepts and terms that reflect the achievements of modern medicine, and for this reason, increasing the ability to think logically and analyze them is the need of the hour.

Emerging from the above, it can be said that in general in Uzbekistan, the main and progressive trends of research in the field of logic as the fundamental and qualitative object of philosophy, on the one hand, correspond to the trends of the development of world philosophy, and on the other hand, it is necessary to pay attention to ensuring the relevance of our philosophy to the real possibilities, benefits, and needs of our homeland. The leitmotif of the changes currently taking place in philosophy is primarily the consideration from the standpoint of logical points of view of human and humanism, as well as nature, modern technologies, and the wide application of medical education. It is necessary to pay attention to the fact that it is realistic and corresponds to the real nature of the problem that needs to be addressed.

References:

- 1. Askarovna, S. M. (2021). General Linguistic Theories in English Linguistics of the Xvi-xvii Centuries and the Practice of Norms in Vocabulary. European Scholar Journal, 2(4), 504-506.
- 2. Шукурова, M. (2023). XVI-XVII ASRLAR INGLIZ TILI ETIKA TERMINLARINING STRUKTUR TAHLILI. ЦЕНТР НАУЧНЫХ ПУБЛИКАЦИЙ (buxdu. uz), 41(41).
- 3. Шукурова, M. (2023). REVIEW OF LINGUISTIC THEORIES IN THE ENGLISH LANGUAGE OF THE RENAISSANCE PERIOD. ЦЕНТР НАУЧНЫХ ПУБЛИКАЦИЙ (buxdu. uz), 41(41).
- 4. Shukurova, M. A. Development of The Informative Structure of The Lexical-Conceptual Field of Ethics in the 16th-18th Centuries.

