

# **Unani medicine from Egypt to Hippocrates of Cos and Ayurveda medicine to modern day**

## **Are the traditional medical systems of Unani, ancient Greek and Ayurveda based on the same health restoration principles?**

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### **Introduction**

The traditional medical systems can be traced back to very ancient civilisations of the world, where they can be recognised as long and distinguished ones in character. With the dawn of medicine, one can witness humans attempting to discover and invent methods to relieve illnesses and fix injuries to ensure a healthy existence and continuation of life. It is also noticeable that distinguished personalities from antiquity have pursued medicine as a branch of science and knowledge. As a result, one can trace a noticeable development in the ideology and practices of medicine, which existed in ancient cultures and developed gradually up to the present day.

Out of the numerous, Unani medicine from ancient Egypt, Greek medicine from ancient Greece, and Ayurveda medicine from India can be identified as three principal traditional medical systems that have been able to successively and respectively survive in the modern world of medicine. However, it is remarkable to note that one can witness similarities in the teachings and practices based on the principles of the restoration of health among these three traditional medical systems. Moreover, all three identified traditional medical systems of Unani, Greek and Ayurveda are based on the concept of Humours as their basic principle of restoration of health. The Humoural theory identified a number of bodily liquids as the main constituents of living beings. It identified health as the maintaining of balance between these Humours while the disease was caused by its imbalance. Its earliest roots in the west can be detected in Unani medicine (1200 BCE)<sup>1</sup> and in Greek medicine in the medical cult practices of Asclepius in Asclepeions (700 BCE) and later in Hippocrates, who was an Asclepiad (460 – 377BCE). In the East, the Humoural theory can be witnessed in Ayurveda (1000 BCE) as the concept of Tridosha.

Undoubtedly, scholarly attention has been paid to individual studies on the three principal traditional medical systems of Greek, Unani and Ayurveda. Similarly, comparative studies have been done comparing and contrasting Greek and Ayurveda Traditional Systems of medicine, Greek and Unani Traditional systems of medicine and also Ayurveda and Unani traditional systems of medicine. However, the significance of this research lies in the fact that

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<sup>1</sup> National Health Portal India, [https://www.nhp.gov.in/historical-background-of-unani-medicine\\_mtl](https://www.nhp.gov.in/historical-background-of-unani-medicine_mtl)

it concentrates and analyses the three traditional medical systems of Unani, ancient Greek and Ayurveda and tries to come to a conclusion about whether all three systems of traditional medicine are based on the same principles of the restoration of health.

Thus the research question is to find out whether the traditional medical systems of Unani, ancient Greek and Ayurveda are based on the same principles of the restoration of health. Therefore the objective of this study is to compare and contrast the aforementioned principle systems of traditional medicine, which are Unani, Greek and Ayurveda, in order to discover whether they share the basic principle of healing and ailment when it comes to diseases. Through the identified similarities, it cannot be concluded which influenced which first. However, it can be seen that the basic principle of medicine underlies the three traditional medical systems, Unani, Greek and Ayurveda.

According to Unani medicine, *Akhalaat* were the cardinal liquids present in the body which caused and affected the health of a person as an imbalance in the *Akhalaat* caused diseases and restoring the balance to the *Akhalaat* restored health. There are Four *Akhalaat* in the body namely, *Dam* (Blood), *Blagham* (Phlegm), *Safra* (Yellow Bile) and *Sauda* (Black Bile). Thus, the four *Akhalaat* serve the function of supplying nutrition, growth and repair and also produce energy for the body.

Then according to Greek medicine, the cardinal fluids are identified as Humours. The four Humours, according to the Greek medical teachings, are *blood*, *phlegm*, *yellow bile* and *black bile*. Proper Health is interpreted as the maintenance of balance among the four Humours of *blood*, *phlegm*, *yellow bile* and *black bile*. Accordingly, every organ in the body was supposed to have a unique balance of the four Humours. For instance, all these four liquids were present in the body, but their levels changed with the disease. Thus, these Humours only appear in illness and they disappear when the patient regains health, providing the proper balance to the unbalanced or excessive Humours present.

Finally, according to Ayurveda medicine, it is also recognised that the Tridosha (vatha, pitha and kapha) is the key to the maintenance of health as any disturbance caused to their equilibrium will cause disease. However, in Ayurveda, Blood is not identified to a component of Tridosha because, according to Ayurveda<sup>2</sup>. Thus, all three traditional medical systems of Unani, Greek and Ayurveda identify the presence of a cardinal fluid/ liquid in the human body, which is responsible for the maintenance of proper health. Thus the maintenance of balance among the cardinal liquids assured health, while any imbalance caused to the equilibrium of the cardinal liquids caused diseases and illnesses in the body.

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<sup>2</sup> . Susruta has mentioned that blood as fourth dosha. (susruta samhita sutra 21 chapter).

Thereby it is evident that all three traditional medical systems of Unani, Greek and Ayurveda are based on the same principles of the restoration of health identified as the concept of Humours. That is, the maintenance of balance among cardinal liquids/fluids assured proper health while any disturbance caused to its balance caused disease in the body. Then the other important observation is that all three traditional medical systems recommend and identify the importance of pureness of atmospheric air, balanced food and drink, bodily movements and responses, psychic movements and responses, sleep and wakefulness and finally, retention and evacuation as essentials for the maintenance of a healthy state. Thus the role of the physician was to detect the Humour or the Cardinal liquid/fluid which was imbalanced and try to restore balance through medication combined with diet, rest and exercise, most importantly.

The modes of diagnosis of the diseases between the three traditional systems of Unani, Greek and Ayurveda can also be identified to be similar because it mainly focused on imbalanced cardinal liquid, the faculty of the organ involved and finally, the severity of the disease. Then the treatments were undertaken accordingly. Moreover, all three traditional medical systems of Unani, Greek and Ayurveda have paid much attention and awareness to the importance of a healthy and strong immune system to resist diseases. It has been often identified that people with weak immune systems are vulnerable to disease as it causes the formation of imbalanced cardinal liquids/ fluids more than a person with a strong immune system. Thus here also the importance of pure air, balance and healthy food and drink, bodily movements and responses, psychic movements and responses, sleep and wakefulness and retention and evacuation as essentials for the maintenance of a healthy state for a healthy and strong immune system are identified by Unani, Greek and Ayurveda medical systems.

Further, it is noticeable that each system of medicine deals with the concept of basic elements. In each, it was based on the ideology that the human body is made up of these elements. For instance, *Arkan* (earth, air, fire, water) in Unani medicine, *Elements* (earth, air, fire, water) in Greek medicine and *Panchabhutas* (earth, air, fire, water, aakash). Moreover, all three traditional medical systems identify the cardinal liquids/fluids to be the product of five elements. It can also be stated that the elements which were responsible for the cosmic creation were identified to be the constituents of the human body as well as excluding the supernatural element from medicinal practices to some extent. This conceptual change and the rational development of knowledge attached to medicine can be identified as a turning point in all three traditional medical systems. Thus it is evident that the three identified traditional medical systems of Unani, Greek and Ayurveda are based on the same concept of restoration of health. That is the theory of Humours identified as cardinal fluids/ liquids as aforementioned. It is not easy to state or discover as to identify which traditional medical system made the initial move in influencing the other. However, the continuation of the same concept as the theory of Humours can be seen among the three traditional medical systems of Unani, Greek and Ayurveda.

## Methodology

The main objective of this study is to observe whether the three traditional medical systems of Unani, Greek and Ayurveda share the same concept of restoration of health. Thus, this study will use qualitative research methodology. This will involve the historical method as this study will have to read, analyse and interpret historical material in English and Sinhala translations as its main device for gathering and analysing information. It will mainly involve the finding, reading, evaluating, organising and synthesising of both primary sources and secondary sources relevant to the topic in order to finally arrive at the purpose of the study. Thus initially, Primary sources would be analytically examined for their historical value and the light they throw on the society and culture that they emerged.. Analysing of Secondary sources would provide an understanding and an insight into the perspective of appreciation and analysis of extant research.

## Results

In the respective traditional medical systems of Unani, Greek and Ayurveda it can be observed that their basic principles of healing are based and deal with the relative balance of certain vital fluids or liquids of the body, which are respectively called *Akhlat* in Unani, Humours in Greek and *Doshas* in Ayurveda. They are referred to as cardinal liquids/ fluids and their involvement in human health is defined as the Humoural theory. Out of them, two traditional medical systems, Unani and Greek, identify them to be blood, phlegm, yellow bile and black bile while in Ayurveda, they are yellow bile, black bile and phlegm. It is because in Ayurveda, "Earth" was separated from the four elements of the universe owing to its solid properties and was rearranged into the seven elements of the body called "dhatu"; and the other three elements. "Water", "fire", and "air", were integrated as the *tridosha* theory, namely, the theory of the three cardinal liquids/fluids, owing to their properties of fluid. Therefore, "Blood", assigned to the element of "earth", was segregated from the Tridosha because "blood" was considered to be comprised of the properties of every Humour without having its own peculiar properties. Therefore, the diseases caused by disturbed/ imbalanced "blood" were regarded as a collected disease caused by the other three imbalanced Humours. Then the category of the disease, caused by disturbed/imbalanced "earth", did not appear. Thus blood is not included as a cardinal liquid/fluid in Tridosha in Ayurveda.

Nevertheless, all three systems of traditional medicine deal with the basic principle based on the concept that any disturbance caused to the balance/ equilibrium of the cardinal liquids of the body cause disease and by restoring balance to the imbalanced or disturbed Humours, health can be restored in the body. The methods prescribed by all three systems to restore these disturbed Humours are also similar. Among them are the importance attached to a balanced diet, lifestyle modification methods, hygienic purification treatments, sleep and physical exercises. Further, it is noticeable that each system of medicine deals with the concept of basic

elements. In each, it was based on the ideology that the human body is made up of these elements. For instance, *Arkan* (earth, air, fire, water) in Unani medicine, *Elements* (earth, air, fire, water) in Greek medicine and *Panchabhutas* in Ayurveda (earth, air, fire, water, aakash)

## **Discussion**

Under the topic ‘Unani medicine from Egypt to Hippocrates of Cos and Ayurveda medicine to modern day’, the objective of this research is to find out whether the traditional medical systems of Unani, ancient Greek and Ayurveda based on the same principles of restoration of health. For this, under Qualitative data analysis methodology, Historic method was used as the study had to interpret historical material in English and Sinhala translations, make statements to discover and finally to describe issues negotiate the purpose of the study. As identified, all the three traditional medical systems identify a cardinal liquid/ fluid present in the human body to be the key factor in recognising an individual’s health. It is recognised to be produced when the five elements of space, air, fire, water and earth combine to form the human body, they do so by creating three vital energies, which are identified as cardinal fluids/ liquids. These are the forces that govern all psycho-physiological functions in the body and mind respectively. They construct the body and serve to maintain it in a proper state of health. This theory of restoration of Health in Human body is identified as the Humoural theory.

The history of the Unani medical system can be traced back to the ancient civilisations of Egypt and Babylon, where it was characterised by theurgic practices and actual practices of healing which were more scientific. It is also noticeable that Unani medical system can be identified as having multi-cultural influence in its teaching and practices and some identify it to be a kind of conceptual bridge between east and west. For instance, though it originated in Egypt initially and had Babylonian influence, however, it reached Greece and had the influence of Hippocrates and in Rome from Galen. It also follows the line of Islamic conversion and conquest during medieval and Pre- modern periods and thereby is believed to be extended from Spain to South East Asia. As a result been practiced in the modern times, all these multi-cultural influences can be seen in the Unani medicine. At present it is mainly practised in India and other countries like Bangladesh, Pakistan, Sri Lanka, Nepal, China, Iran, Iraq, Malaysia, Indonesia, Central Asian and Middle Eastern countries. Consequently, this Unani medical system is identified with different names in different parts of the world, such as Greco- Arab medicine, Ionian medicine, Arab medicine, Islamic medicine and Oriental medicine.

According to the ideology of Unani medical system, the human body is a complex structure comprising Seven *Umoor-e-tabiiyyah* (*Components*). They are *Arkan* (elements of Earth, Air, Fire and Water), *Mizaj* (temperament), *Akhalaat* (Humours), *Aza* (Organs), *Arwah* (pneuma), *Quwa* (faculties) and *Af’aal* (functions). It was believed that for the proper functioning of the body, all the above-mentioned components should be present and work in coordination with each in maintaining proper health. However, the basic principle of Unani medicine was based

on the Theory of *Akhalaat*. *Akhalaat* were cardinal liquids/fluids present in the body which caused and affected the health of a person as the unbalancing of the *Akhalaat* caused diseases and restoring the balance of the *Akhalaat* restored health. *Akhalaat* are also identified to be the moist and fluid parts of the body which are produced after the metabolism and conversion of the elements (Earth, Air, Fire, and Water). Thus the four *Akhalaat* serve the function of supplying nutrition, growth and repair and also produce energy to the body. According to Unani medicine, there are Four *Akhalaat* in the body, namely *Dam* (Blood), *Blagham* (Phlegm), *Safra* (Yellow Bile) and *Sauda* (Black Bile).

The principle theory of restoration of health in the Unani system of medicine addresses the equilibrium of the body that depends on the balance of the four *Akhlaat* and temperaments which are balanced by six essential factors such as atmospheric air, diet, sleep and wakefulness, elimination and retention, mobility, psychological condition. The disturbance caused to any of these factors will affect and change the quality of temperament and quantity of *Akhlaat*, which disturbs equilibrium and lead to the production of imbalanced and unhealthy *Akhlaat*. These unhealthy *Akhlaat* are the main cause of disease. In order to get rid of the unhealthy and imbalanced *Akhlaat* various methods and drugs are used. However, the adjustment of the real cause of disturbance in equilibrium should be treated initially. Hence, The Unani system of medicine treats deeply and especially concentrates on the actual root of the disease through the examination of surgically removed organs, tissues (biopsy samples), bodily fluids (*Akhlaat*), and in some cases, the whole body (autopsy). If not, the practitioners of Unani medicine believed that the diseased condition may sustain for a duration but can develop again. Therefore, according to the teachings of Unani medicine, understanding of these doctrines properly to find the cause is the key to the treatment of imbalanced Humours.

According to the teachings of the Unani medical system, the Humoral imbalance can be corrected by medication coupled with a proper diet and healthy lifestyle. It is also emphasised that proper diets are assumed to produce Good Humours (*Akhla Saliha*) while improper diets are assumed to produce Bad Humours (*Akhla Raddiya*). Thus it is also noteworthy that in Unani medicine, the concept of preservation of health is also held in high regard. For instance, it is identified that, atmospheric air, food and drink, bodily movements and responses, psychic movements and responses, sleep and wakefulness and retention and evacuation as essentials for the maintenance of a healthy state. Thus it can be identified that the Unani medical system's principles for restoration of health are based on the restoration of *Akhalaat*.

Greek medicine is believed to have begun flourishing in the 6<sup>th</sup> Century BCE, Greece. During this period, one can witness the philosophical foundations of ancient Greek medicine. Philosophical thought, which began from Thales of Miletus (624 – 546 BCE) identified one particular substance from nature as the cause of cosmic creation. Thus it opened a new rationale pattern to the studying of the main causes of diseases which can be detected from nature. This

led to the systemisation of Greek medicine upon a rational foundation. Moreover, as a result, the emergence of medical schools can be witnessed during this period.

For instance, though healing had remained a family tradition in ancient Greece, with the beginning of the 6<sup>th</sup> Century BCE, one can witness the schools of medicine at Croton, Cnidus, Sicily and Cosovo. Thus the development of rational thought and the formation of numerous different medical schools which were equal in their achievements that understood the unity of man and the nature to interpret diseases and their cures were the conscious work of many generations of healers of various policies of ancient Greece.

The Hippocratic corpus, which is a collection of medicinal writings attributed to Hippocrates is considered vital in Greek medicine. Its content covered subjects relating to pathology, preservation of health, physiology, embryology, gynaecology, surgery and medical ethics. Moreover, many of the Hippocratic treatises are identified to be practical manuals containing useful medical knowledge. Most importantly, the corpus is identified in scholarship as a work of a large number of medical writers belonging to different schools of medicine that stood for varied viewpoints. However, as G. E. R. Lloyd points out, “Hippocrates’ fame inevitably eclipsed that of all other early doctors, and he came to stand for whatever any given writer held to be the most valuable in in early medicine<sup>3</sup>.” As a result, Hippocrates has always stood for an ideal in Greek Medicine.

In Greek medicine, Health is interpreted as the maintenance of balance among the four Humours of *blood*, *phlegm*, *yellow bile* and *black bile*<sup>4</sup>. *Blood*, the element of air (hot and moist), is the vital force of the body and is regarded to be the very essence of youth and health. Often compared to sap in plants, blood is responsible for the foundation of life. *Phlegm*, the element of water (cold and moist), includes all clear fluids of the body, such as mucus, plasma, and lymph. *Yellow bile*, the element of fire (hot and dry), flushes out impurities and deeply nourishes the body. It reflects the principle of digestion and transformation. *Black bile*, the element of earth (cold and dry), has a conscientious and firm force on metabolism and bone building. It can be expressed as the dried blood found in stool, very dark urine, serious fevers caused by malaria, or, more abstractly, as constipation, bloating, and arthritis.

Accordingly, every organ in the body was supposed to have a unique balance of the four Humours. For instance, all these four liquids were present in the body, but their levels changed with disease. Thus, these Humours only appear in illness and they disappear when the patient regains health, providing the proper balance to the unbalanced or excessive Humours present. The main role of a physician, according to Greek medicine was to detect the Humour, which was unbalanced and try to restore balance through diet, rest and exercise.

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<sup>3</sup> Hippocratic writings, G. E. R. Lloyd, (Penguin Classics, 1978)

<sup>4</sup> On the nature of the man, Hippocrates

Then the origin of Ayurveda medicine is commonly traced to *Atharavaveda* of 1000 BC, which is identified as bearing details of theurgic practices which is similar to that of Unani medicine in Egypt. Nevertheless, with the development of Ayurveda medicine which occurred with its systematisation into a proper system of medicine during 6<sup>th</sup> – 4<sup>th</sup> centuries BCE, rational thought based on the relation between man and nature, between man and the perceivable materialistic world and the elevation of mind over the senses was infused. Moreover, as a recognition of the Atharvaveda, the earlier roots of Ayurveda medicine, a branch called *Bhutha Vidya* (psychiatry and demonology) was included in Ayurveda medicine alongside its rational development. Ayurveda medicine recognised the interrelatedness of body and mind and thereby explained health and disease in terms of five elements called *Panchabhutas* (Earth, water, fire, air and aakash). According to Ayurveda, the body is made up of Doshas, which are identified to be Vata, Pita and Kapha which is also a combination of Five Elements identified as ‘Panchabhutas’. For instance, Vata dosha is derived from the elements of Space and Air. Pitta dosha is derived from the elements of Fire and Water. Finally, kapha dosha is derived from the elements of the Earth and Water. Dosha is a central term in Ayurveda originating from Sanskrit, which can be translated as “that which can cause problems”. However, these three energies were responsible for the formation and maintenance of the body. Out of these three energies, one will be dominant in the body, followed by a second dominant and a third which is least dominant. This combination is different from individual to individual, which is called Prakurthi (Balanced Body Type). This is the main reason for the treatments to be different from one individual to the other. Moreover, the *Tridosha* are responsible for the physical and mental growth and development of natural urges and the individual choices in foods, their flavours, temperatures, tastes etc. Thus, they are in control of the creation, maintenance and destruction of bodily tissue and the elimination of waste products from the body. These are also responsible for emotional urges, such as fear, anger and greed along with the higher order of human emotions such as love, compassion and understanding.

It also recognised the Tridosha (vatha, pitha and kapha) as the key to the maintenance of health as any disturbance caused to their equilibrium will cause disease. For instance, a Dosha is a substance that flows or circulates within the body, bringing disease through excess or deficiency, which again indicates an imbalance. In Ayurveda treatment, it is important to figure out the cause of imbalanced Dosha with their qualities and thereby decide the line of treatment. Consumption of unhealthy food, living an unhealthy lifestyle, stress, seasonal changes/ climate and Karma (what wrong/sin one has committed in the past life) are identified to be the reasons for the imbalance of equilibrium of the Humours. If the body is affected by any of the above causes, then the change of body balance (Prakurthi) to an imbalanced body type (Asvikurthi) causing different diseases. So in order to treat the disease, the qualities of Dosha- vata, pitta, kapha should be treated. Consequently the balance can be restored through prescribed medicine, food, exercises and rest. When the balance is restored, the body is removed from ‘Asvikurthi’ state and restored to ‘Prakurthi’ state. Thus, the balance among the Tridosha is



necessary for maintaining proper health. Any kind of imbalance in the Tridosha can trigger emotions like fear, anger and anxiety and affect the body's natural immune system, giving rise to diseases.

## **Implications**

Thus it can be concluded that the three ancient traditional medical systems identified as Unani, Greek and Ayurveda are based on the same basic principle of healing, which can be identified based on the Humoural theory as the constant maintenance of balance among the cardinal fluids or liquids. For the balanced cardinal liquids ensured/assured the proper health of an individual, while the imbalanced ones were identified to be the cause of disease in an individual.

This theory of the restoration of health identified as the Humoural theory, underlines the basic principle of healing in the three traditional medical systems of Unani from Ancient Egypt, Greek from Ancient Greece and Ayurveda from Ancient India.

Moreover, it is noticeable that the knowledge based on each system of medicine, both in their teachings and practices, has been able to penetrate into the modern Western medical system. For instance, teachings and practices of Unani medical system are still present in countries like Persia, Pakistan, and India. It is also practiced in South Africa, England and India. The Unani system is called Hikmat or Unani-Tibb in the present. Moreover in the Government Ayurvedic Universities in Sri Lanka, teachings of Unani medicine have been included as a compulsory unit in their Degree programmes along with Indigenous medicine and Ayurveda medicine. Thus it implies the importance attached to Unani medicine even in the present day society. Ayurveda medicine system is also recognised and practiced as a practical system of medicine even in the 21<sup>st</sup> Century for it provides cures and teachings that were imparted at the very beginning of world's civilisations. Even in Sri Lanka there are major Ayurveda hospitals where they cure diseases even surprising Western medicinal practices. For instance there are still people who prefer Ayurveda medicine over Western medicine even in the contemporary society. Similarly, the ideologies of Greek medicine can still be witnessed in Allopathy, a system of medical practice which treats disease by the use of remedies which produce effects different from those produced by the disease under treatment. Most importantly the Western medicine that we have today is the Hippocratic medicine. Moreover, the emblem of WHO's which was chosen by the First World Health Assembly in 1948, consists of the symbol surmounted by a staff with a snake coiling around it. The symbol of the snake is from the story of Asclepius, who was revered by the ancient Greeks as a god of healing and whose cult involved the use of snakes as being symbolic of rejuvenating powers and there by, strongly connected with the Greek medical system.

Thus it is significant to note that the three ancient traditional medical systems identified as Unani, Greek and Ayurveda are based on the same basic principle of healing and their influence

can even be witnessed very profoundly even in the Western medical systems in the present as well as aforementioned.

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