

THE MESSAGE OF ISLAMIC SCIENTIFIC AND MEDICAL CIVILIZATION IN ANDALUSIA – THE PATH TO ENLIGHTENMENT IN EUROPE

¹ **Dr. Sekakkou Houria**

University-Centre of El Bayadh, Algeria

h.sekkakou@cu-elbayadh.dz

² **Dr. Maaziz Abdelkader**

University-Centre of El Bayadh, Algeria

a.maaziz@cu-elbayadh.dz

3. Dr. hacini Abdelkader

University-Centre of El Bayadh, Algeria

abdelkaderhacini32@gmail.com

ABSTRACT

The West recognizes, and the testimonies of its scholars, the scientific merit and achievements made by Arab-Islamic civilization, through the efforts of its scholars, for humanity, in various sciences, most notably medical sciences within the framework of what was known as "scientific civilization" and the experimental scientific method that moved scientific research to advanced stages, which took giant steps that the West benefited from, until it reached what it is today, as European universities were influenced by Arab sciences. It relied on the huge Arab-Islamic heritage, and its teaching approach became for many centuries. Also, the fact that humanity's need for treatment is an urgent, inevitable necessity, in the integration of those efforts aimed at eliminating all diseases that were affecting the human body, by trying to explain them, understand their causes, and then diagnose them to find their own treatment, and from there medical studies received great attention.

Keywords

Islamic. Scientific. Medical. civilization in Andalusia.

Introduction

Muslim scholars, whether in Andalusia or in all parts of the Islamic world, have made tremendous efforts, whether in benefiting from the heritage of previous nations, preserving it from disappearance, and even studying it, translating it, and adding to it, while discovering new methods of study and research, and facilitating access to it by Scientists from all regions of the world, then applying the experimental method and calling for work on it with the aim of reaching the desired results. Thus, the Arabs reached the stage of

writing and classification, because the Holy Qur'an and the Sunnah of the Prophet preserved this purpose and called for preserving human health and sparing him everything that leads to his destruction, which gave the character of universality to the message of medicine in Islam, which spread in the East and the West, that advanced experience. It was transmitted through many crossings, including Andalusia, "the lost paradise of Muslims," and from it this topic was addressed. Focusing mainly on the role of Muslims in the establishment of "scientific civilization" in the field of medicine, and the

factors that helped in that, then their efforts and testimonies of Western scholars who recognized that credit, and names of the most important of those Muslim scholars in Andalusia and their great role in developing medical sciences

One of the most prominent cultural achievements of Muslims was "scientific civilization," as it preserved for the world the heritage of humanity in this field when the pioneers of Islamic civilization translated the books of the Greeks, Persians, Indians, and Chinese that reached them. They were not satisfied with that, but rather criticized. They were correct, then they invented and excelled in the fields of science, arts, and literature. Thanks to that, the universities of the Islamic world, from East to West, became a demand of the kings of Europe. Princes and students came to her out of a desire for knowledge and treatment

In this regard, we find the testimonies of Western scholars about the virtue of the Muslim Arabs, as Dr. Sarton, one of the famous American scholars in the history of science, said: "The Arabs were the greatest teachers in the three centuries: the eighth, 11 AD, and 12 AD... If the treasures of Greek wisdom had not been transferred to us, the city would have stopped moving for a few centuries..." As the Jewish researcher Franz Rosenthal testified, he said, expressing his admiration for the greatness of Islamic civilization: "The development of this civilization is an exciting topic, and one of the most worthy topics for contemplation and study in history... And it can be called a miraculous civilization..."

The Muslim Arabs were among the most passionate people in science, one of the best in preserving the heritage of ancient nations, and one of the greatest in their lives. They founded universities, libraries, and hospitals in Baghdad, Damascus, Cairo, Cordoba, Kairouan, Bukhara, and others. One of the prosperous capitals, as it was one of the most important contributions of Muslims in the scientific field in medical sciences,

those sciences related to human health, and related zoology, botany, pharmacology and genetics, where the creativity of Muslims in medical sciences was not limited only to treating diseases, but also went beyond establishing an authentic experimental approach, the effects of which were reflected in aspects of medical practice, which constituted a group of Islamic contributions in graduating a great crowd of rare medical geniuses.

In the same context, it is necessary to point out the set of factors that helped in that scientific renaissance, which contributed to building Islamic scientific civilization, and from which the nations of the world benefited:

- Freedom of opinion and scientific research, as Arabs enjoyed great freedom of opinion, which Europe did not exercise until centuries later.
- Arab scholars' superiority over luxury, money, and authority.
- Mental readiness, patience with work, and the appropriate scientific climate. Ibn Sina, for example, produced 276 books, and Ibn al-Haytham produced about 200 books.
- The rulers and governors' appreciation of knowledge and scholars. They were proud of those who attended their council, and in the field of medical practice we find their attraction to well-known and famous doctors, thanks to the precise organization and extensive livelihood placed on them by the rulers and those on the left.

When talking about Arab medicine in general, we find that Arab-Islamic medicine is basically everything related to health, illness, treatment, medical information, Qur'anic verses and noble Prophetic hadiths, where the judiciary was made after the advent of Islam over fortune-telling. It opened the door to natural medicine, as it abolished treatment with magic and sorcery, and no new class occurred in the place of priests to undertake treatment in the name of religion

History has recorded for us great interest and care on the part of Muslims as it is one of the important

doors of pure Islamic sciences. They studied and benefited from the experiences and expertise of the civilizations of ancient nations and peoples, and even added to them, within the framework of what was known as the aforementioned Islamic scientific civilization, and the efforts of Muslims. In preserving the scientific heritage of humanity.

Arab-Islamic medicine emerged mainly from the Arab-Islamic civilization, by extracting its forms from the Holy Qur'an and the Noble Sunnah of the Prophet, in addition to what was deduced from every ancient Arab medicine, which was known in the oldest eras of pre-Islamic times, in the manner of nomadism, and the reliance on it was mainly by treatment with fortune-telling, divination, astrology, talismans, letter science, ruqyah, and amulets, in addition to treatment with plant and mineral drugs and drinks, or the use of surgery such as bloodletting, cupping, and cauterization. With the exclusion of everything that is magic and fortune-telling, as it is forbidden in Islam.

It seems that the Arabs' long work in herding livestock approached them with scientific experiments, and with the emergence of Islam, prophetic medicine appeared, which includes a group of prophetic hadiths numbering three hundred hadiths, dealing with some ills, and dealing with some of the methods of treatment that the Messenger (may God bless him and grant him peace) outlined. Peace be upon him), and some important advice such as urging treatment: "Treat the servants of God, for God has not created a disease without providing it with healing".

In fact, it was the Arabs who invented the method of true scientific research based on experience. "The Arabs did not save Greek civilization from disappearance, organized it, arranged it, and then gave it only to the West. They are the founders of experimental methods in chemistry, nature, arithmetic, algebra, geology, trigonometry, and sociology, in addition to

countless individual discoveries and inventions in various branches of science. Most of which were stolen and attributed to others, the Arabs gave the most valuable gift, which is the way to know the secrets of nature and apply it to them today..."

Thanks to the efforts of Arabs and Muslims in the Umayyad and Abbasid eras, the encouragement of the scientific movement and the translation movement, and the desire of scientists to examine the heritage of Eastern civilizations and correct the errors contained therein, then they added a lot to it through the new medical literature they developed, as a result of experience and observation, and they excelled in diagnosing many of diseases, Al-Razi succeeded in distinguishing between colic and kidney pain, measles and root, and Ibn Sina between pneumonia and acute and secondary meningitis. Intestinal colic and renal colic, and the diagnosis of anthrax and the resulting fever, which he called Persian fever... The Islamic medicine of Abu Al-Hasan Ahmad bin Muhammad Al-Tabari (d.366 AH/976 AD) condemns the discovery of the insect that causes scabies, which the Andalusian doctor Ibn Zuhr succeeded in treating. A curative treatment, and the Egyptian doctor Ibn al-Nafis reveals the small blood circulation ...

What is worth noting in terms of the uses of the experimental method is that Al-Razi relied on resorting to experience in that it is the test that separates right and wrong. This helped him a lot in the proper diagnosis of diseases, and he established the rules of clinical diagnosis with his approach, and established rules that are still in effect until now in the medical field, which is represented by the importance and accuracy of interrogating the patient, as well as taking care to examine the patient completely.

The use of the experimental scientific method by Muslims is confirmed by the fact that Islamic medicine schools adopt two approaches: a theoretical approach in medical schools, and a practical approach to training and training in

which students gather around the chief physician and see how he examines patients and the treatment he prescribes for them, and after passing the study, the exam is Then take the oath, and the practice of medicine is under state supervision . Indeed, the establishment of medical specialties is considered one of the most important achievements of Arab-Islamic civilization, such as the specialty of internal diseases, called medical doctors, specialists in performing surgical operations, called surgeons, and orthopedic treatment, called compulsors. We find ophthalmology, dentistry, women, children, psychiatry, and mental medicine .

The Arabs, with their interest in the field of research in various sciences, including medicine, did not take that heritage as a raw material, but rather the credit goes to their scientific experiments and research in developing what they took, so they formed a new formation and a scientific experiment that was transferred to all parts of the world through many crossings, including The country of Andalusia () is one of the most important crossings of knowledge and science to the West, from which it benefited in building the edifice of its scientific civilization.

The country of Andalusia is a word given by Muslims to most parts of the Iberian Peninsula located in the southwest of the continent of Europe, and what is generally meant by it is Islamic Spain. This country has been described as being a decent spot with good soil, and its good things are permanent, and it has many cities and bases. Great .

History has recorded a great flourishing of medical science among Muslims in Andalusia, about which Ibn Khaldun said: "This industry is necessary in cities and regions because of its benefit. Its fruit is to preserve health for the healthy and ward off disease from the sick with treatment..," as it reached its peak in the era of the Andalusian Caliphate (316-422 AH//) / 929 AD-1036 AH) since Abd al-Rahman al-Nasir III (16)

assumed power in Andalusia in the year (300 – 350 AH/912 – 916 AD) and his son, Caliph al-Mustansir Billah (17) (350-366 AH/961-976 AD), to whom they are credited with establishing The first developed university in Cordoba, which formed the base of Andalusia, the nation of its cities, and was the seat of the Umayyad Caliphate .

This prosperity would not have been possible without the efforts of the best Andalusian scholars, including Muslims, Jews, Christians, and those who came to it, as it "gave Islam, which had created consensus and integration between two opposing civilizations, based on its universal idea and the characteristic of tolerance for its religious concept, and by relying on its ability to The enormous representation and creativity and its distinct tendency to experiment and test . Great fruits in Andalusia, which witnessed the most important ethnic and cultural integration between the East and the West .

These scholars made their trips to the East and deepened their medical studies, until they reached that high level, thanks to their experimental scientific approach recognized by the West, where the science of medicine and other sciences related to it gained the attention and attention of the Andalusians, and it comes at the forefront of sciences. Experimentalism in terms of activity and abundance of scientific production in Andalusia . One of the books that the Andalusians relied on in their study of medical issues was a book translated from Christian books called "Aphorismi," meaning the comprehensive one. They had no insight into the medical industry, as the mosque contained a group of medical pages collected in Spain, and it benefited from them. Healers in treating their patients, which means the whole or the whole . There are those who believe that the abarsim or abarsham, in other words, are taken from (Afrosim), meaning the wisdom that runs the course of the statement, the separation resulting

from experience and expertise, and this meaning was common among Andalusian doctors .

History has witnessed, and with recorded testimonies of Western scholars, that Muslim scholars have a significant role, and their great efforts in scientific civilization in general, and medical sciences in particular. It is not an exaggeration to say that without these efforts, medical science would have been lost, and what would have increased the achievements of medicine. Among Muslims in Europe and their need for it is to deprive the Western Church of the medical industry, because illness for them is a punishment from God 'A person should not distract him from those who deserve him, and medicine remained reserved for him with this argument until after the end of the era called "the era of faith" at the beginning of 12 AD-6 AH, that is, during the Andalusian civilization, which constituted a reason for the Europeans to work to imitate Muslims in seeking medical sciences. And all sciences, especially since the Andalusians were fond and interested in writing in various sciences ' Which led to the emergence of a prosperous Arab-Islamic civilization in the Andalusian Peninsula, which included all types of sciences in the Middle Ages, as the Europeans flocked to it, leaving clear and influential traces in all sciences, most notably medicine .

Many of these scholars were famous in Andalusia, and we will try to mention the most important of them through the following table :

Ibn al-Samh Abu al-Qasim Asbagh bin Muhammad bin al-Samh al-Muhandis al-Gharnati had an interest in medicine" .

Al-Kirmani Abu Al-Hakam Amr bin Abdul Rahman bin Ahmed bin Ali Al-Kirmani is from the people of Cordoba. "He has an interest in medicine and virtuous experiences in it, and a famous influence in ironing, cutting, cutting, and other medical industry. He traveled to the lands of the East, and finished there in Harran. From the country of the peninsula, he became interested

there in engineering and medicine, then returned to Andalusia and settled in the city of Zaragoza .

Hamdeen bin Aban was in the days of Prince Mohammed bin Abdul Rahman Al-Awsat, and he was a skilled and experienced doctor..." .

Al-Zahrawi: Abu Al-Qasim Khalaf bin Abbas Al-Zahrawi, known in Latin as (Abulcasia), was born in the city of Al-Zahra in Cordoba in the year 325 AH/937.

The Andalusian Zahr family was famous for its medicine. Among them was Abu Al-Ala Zahr bin Abdul Malik (525 AH/1131 AD). He was caring and kind to patients, and the most famous and greatest of them was Abu Marwan bin Zuhr (d.557 AH/1162 AD). He made his specialty medicine and writing in medicine (Omar Farroukh, 1970, 289) .

Khalid bin Yazid bin Roman Al-Nasrani, who was proficient in medicine and advanced in his time there and was in Cordoba, earned a large sum of money and real estate through medicine. He was a maker and scholar of tree medicines, and benefits and books appeared from him in the country, which followed a son whom he called Yazid. He did not excel in medicine due to his father's ingenuity .

The son of Maluka Al-Nasrani, who was in the days of Prince Abdullah, and the first state of Prince Abdul Rahman Al-Nasser.

Imran bin Abi Amr was a noble doctor who served Prince Abdul Rahman in medicine .

Yunus bin Ahmed Al-Harrani, who came to Andalusia from the East in the emirate of Muhammad bin Abdul Rahman (237 AH - 852 AD/272 AH - 886 AD), and settled there. "He had good medical studies. He was famous for Cordoba, in addition to his two sons, "Ahmed" and "Omar". Ishaq, the doctor, father of the minister, Ibn Ishaq, a Christian bee, was residing in Cordoba. "He was a maker in his own hands" .

Yahya bin Ishaq was an intelligent doctor, knowledgeable, insightful in treatment, and a

maker of his own hand. He was at the forefront of the state of Abd al-Rahman al-Nasir li-Din Allah. He wrote a book on medicine that included five books in which he followed the Roman doctrine.

Suleiman Abu Bakr bin Taj was in Al-Nasir's state and served him with medicine. He was a noble doctor and "the Commander of the Faithful treated Al-Nasir for ophthalmia that was presented to him, and he treated the owner of the mail for shortness of breath"

Saeed bin Abd Rabbo, "a famous doctor," was known in Andalusia around the year 300 AH/921 AD as one of the masters of medicine, astronomy, and poetry .

Omar bin Hafs bin Burtaq was a distinguished doctor and reciter of the Holy Qur'an. He studied in Kairouan under Ibn al-Jazzar Abu Jaafar Ahmad bin Ibrahim bin Abi Khalid al-Qayrawani (during the first half of the 10th/16th century BC), and he took from him the book "Zad al-Musafer" in treating diseases. It is his main book and he is the one who brought it to Andalusia .

Asbagh bin Yahya, the doctor who was advanced in the medical industry, served Al-Nasser there and wrote to him "The Love of Anison".

Muhammad bin Abdoun Al-Jamli Al-Adhari traveled to Egypt, visited its Bimaristan, was skilled in medicine, had nobility in it, and ruled many of its origins .

Abd al-Rahman bin Ishaq bin al-Haytham was one of the most prominent doctors and virtuous people of Andalusia. He was from the people of Cordoba. He wrote books: The Book of Perfection and Perfection in Laxative and Emetic Medicines, The Book of Limitation and Finding in Khatta bin al-Jazzar, The Book of Sufficiency in Medicine is one of the Properties of Things. He was born and died in Cordoba in the fourth century AH, tenth century AD .

Ibn Jaljal Abu Dawud Suleiman bin Hassan, known as Ibn Jaljal, was a virtuous doctor, expert in treatments, and well-behaved in the medical

industry. In the days of Hisham Al-Muayyad Billah, he served him in medicine and had insight and care for the forces of individual medicines. He interpreted the names of individual medicines from the book of DiCorides Al-Airzabi. He revealed its essence, as his book Single Medicines remained the greatest guide to the properties of medicinal herbs. It has scientific value despite medical progress up to the present time

Andalusia provided Europe with its greatest reference in surgery and orthopedic splinting with the book "Introduction to Those Who Were Unable to Drain" by Abu al-Qasim Khalaf Ibn al-Abbas al-Zahrawi, which was printed in Latin in the 15th century AD, where he had great credit for laying the foundation stone for surgery in Europe, where he learned from it. All surgeons focused on him, especially in opening the bladder and removing the stone. .

One of the important medical books that had a prominent and important influence in Europe since the Middle Ages was Ibn Sina's book: The Law of Medicine. It is one of the encyclopedias of Islamic medicine that has not been matched in its magnitude and scrutiny. It was all translated into Latin and transferred among European doctors. It was translated in the 12th century AD. It is an encyclopedia that collected a summary of what medicine has achieved among the Arabs, Greeks, Indians, and Syriacs., consisting of five parts: physiology, health science, and pathology . Therapeutics and medical materials .

Many cities were famous for providing medical services that were only in Andalusian cities, including Cordoba, the great destination of the East and Morocco, and a number of great scholars, clerics, intellectuals, and scholars flocked to it. Toledo became a center for translation since the 12th century AD/6th, as hundreds of Arabic books were translated into various sciences, including mathematics, astronomy, natural sciences, pharmacy, and medicine, from the books of Al-Razi, Ibn Sina,

and Abu Al-Qasim Al-Zahrawi, which became accessible to students and scholars. In various universities in Europe, the impact of medicine and pharmacy is still clear in European scientific fields. There are Arabic scientific words and terms used in modern scientific languages by drawing them or by some transformation in them, such as: syrup, alcohol, elixir

Among the diseases that the Arabs were credited with treating were insanity, like other natural diseases, which the Franks called divine disease, or demonic disease because they considered it to be injuries to spirits or demons. The Arabs' research in medicine was also coupled with their research in chemistry, from which the Europeans benefited. A lot, and perhaps their benefit from the Arabs' lessons was greater than what they benefited from their medical lessons.

Conclusion:

The prosperity that Andalusia experienced under Muslim rule illuminated the way for Europeans to build their scientific edifice. Thanks to the "achievements of Islamic scientific civilization," it included various sciences, including medical sciences, which were credited with preserving, adding to, developing, and radiating their radiance to all regions of the globe, through the huge encyclopedias of Muslim scholars, in addition to the tremendous efforts in translating the heritage of ancient civilizations and preserving it from disappearance, examining it, and studying it in new ways. And presenting it to European scientists to benefit from it, relying on the experimental scientific method and calling for work on it, and from it they were the first to work on it, and the impressive results it had in developing scientific research, in addition to the quality of the services that were provided in Andalusian cities. Medical, with specialization in various branches of medicine, did not exist in European cities, was an indispensable demand and destination for all of Europe and the world.

It must be noted that the medical sciences of Muslims in Andalusia, and in the Islamic world as a whole, were the reason for Europe to emerge from its scientific slumber, enlighten the thought of its scholars, and eliminate the thought of the Age of Darkness in Europe, in which the European Church worked to drown society. For many centuries, Europe lagged behind the train of scientific radiation for that long period, had it not been for the decline and decline that befell the Islamic world. He could have continued the enlightenment and scientific development he began, because he is truly considered the founder of the first building block of the experimental scientific method, and also in terms of the added scientific value of intellectual production with creativity, innovation, intellectual advancement, and the degree of diligence among the scholars of that golden age .

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