

# THE ROLE OF MUSLIM WOMEN IN THE DEVELOPMENT OF SCIENCE, CULTURE AND EDUCATION IN THE PERIOD OF EARLY ISLAM

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<https://doi.org/10.5281/zenodo.7908599>

**Abstract.** *The relevance of the chosen topic is to identify the main areas of activity of Muslim women in the period of early Islam, which are still little-studied areas of science. The analysis of the scientific works of that period made it possible to discover numerous examples of the active work of Muslim women in various areas of scientific knowledge. The beliefs prevailing in our time that Muslim women were deprived of the possibility of creative growth due to religious restrictions do not allow researchers to fully and objectively assess the historical processes within the vast expanse of the Arab Caliphate. An analysis of the literature shows that certain factual material has been accumulated regarding the activities of Muslim women, a general picture of its existence has been recreated, but there are still few exhaustive research works on the study of the history of the activities of Muslim women scientists. This article attempts to show a general picture of the development of the scientific thought of Islamic civilization with an emphasis on the contribution of Muslim scientists to the development of education, science, education in the Islamic world, the flourishing of Muslim medieval culture.*

**Keywords:** *Islam, a new look at women, women's education, nursing, Islamic culture, libraries, universities, "houses of wisdom", hadith studies, Muhammad Akram Nadwi, the decline of Islamic science.*

## INTRODUCTION

**Formulation of the problem.** Muslim women in the early Islamic period took an active part in many important political and social affairs, conducted scientific research. They made a great contribution to various areas of business, education, charity, hadith studies and the transmission of traditions from the Prophet, nursing, social work, etc. According to the British Arabist, Quran scholar, author of numerous works on the history, philosophy and culture of Islam, William Montgomery Watt the prophet Muhammad significantly improved the privileges and Sharia law for women [10]. In the preface to his book *Islam - Why Muslims Are Like This*, one of the most famous Islamic scholars and experts on Muslim-Christian relations, Professor John Esposito, noted: "Today, many, blindly trusting the stereotypes imposed by the media, look at Islam through a distorted prism, seeing only terrorism, religious extremism and the oppression of women. They mistake the behavior of a radical minority for the religion of the majority." The Prophet Muhammad achieved the granting of privileges and rights to women in many areas: education, economic status, family and marriage [6].

Islam approved a new look at a woman, a new attitude towards her. A ban on the murder of newborn girls was introduced, women were provided with the right to inherit, take part in economic life, and independently manage their property. Speaking about the position of women in Muslim countries, Annemarie Schimmel, the largest researcher of Islamic mysticism, winner of many awards, including the Order of "Dustlik" (Uzbekistan, March 27, 2002) [26], emphasizes

the progress in improving the social status of women compared to their position before acceptance of Islam [27].

### **MATERIALS AND METHODS**

During the first centuries, Islam actively supported all scientific endeavors. On the vast territory of the caliphate, a common Muslim cultural space developed, where mathematics, medicine, philosophy, physics, chemistry and other sciences developed. Islamic culture absorbed the achievements of scientists from various nationalities and religions who lived in the vast expanses of the Caliphate. Wealthy Muslims provided patronage to scientists and the development of sciences. The famous Swiss orientalist and Arabist, Professor Adam Metz, in his book "Muslim Renaissance" describes the care with which noble Muslims kept manuscripts. Caliphs, emirs financed the initiatives of scientists, organized and opened madrasahs, which had huge libraries with hundreds of thousands of books, there was a custom to bequeath their books to mosques[1]. By the 10th century, many libraries and schools appeared, which were founded in Basra, Isfahan, Nishapur, Rae, Damascus and Cairo. Some of the books in such libraries were listed by Ibn al-Nadim in his bibliographic collection "Kitab al-Fihrist" and in the biographies of scientists and philosophers Ibn al-Kifti "Ta'Rih Al-Hukama", Ibn Abi Usaybiya "Uyun Al-Anba fi -Tabaqat al-Atibba" and Ibn Juljul "Tabaqat al-Atibba "wa'l-Hukama" [22]. The Ottoman scholar Haji Khalifa (Kâtip Çelebi 1657) in his Kasha Al-Zanun listed all the books that were translated into Arabic language by famous Hindu, Christian, Jewish and Parsi scholars, kept in the Baitul Hikma Library in Baghdad. The library in Cairo, Hazain Al-Qasur, had 200,000 volumes, and the library of the Jami al-Azhar Mosque over two hundred thousand volumes. And this is almost 600 years before the creation of Oxford's Bodleian Library and 440 years before the creation of the Vatican Library His collection is estimated to include 9,062 books and 595,668 manuscripts dating from at least the 8th century [22].

French writer and historian, specialist in library history Polastron Lucien in his study "Books on Fire. The history of the endless destruction of libraries" writes: Medieval Islam is the true Olympus of libraries [16]. The achievements of the scientific thought of scientists, the theory and practice of training and education of the Middle Ages had a beneficial effect on the development of European culture. The education system of universities, "houses of wisdom" often served as a role model for the West. In areas where Islam spread, primary schools began to function for the general population. Young people of different nationalities and regions studied at universities, outstanding scientists worked. Universities have trained thousands of qualified specialists who have laid the foundations for the development of many modern sciences [19a]. Thanks to Muslim specialists, Europeans set up paper production, increased handwritten editions of books representing the achievements of the scientific thought of that time and world culture. With the spread of books, new cultural centers were created - libraries, various educational institutions, the number of literate people increased.

Islamic scientists, writers and artists of this period made a significant contribution to the development of world science and culture. Arabic was the international language at that time. Islamic scholars from different countries came to scientific conferences and communicated in Arabic. All scientific works were translated into Arabic [10]. Simultaneously, translations from Arabic into Latin developed. According to the Stanford Encyclopedia of Philosophy, the translation of philosophical texts from Arabic into Latin in Western Europe "resulted in the transformation of almost every philosophical discipline in the medieval Latin world" [9] / Howard

Turner notes: "Muslim artists and scholars, workers and princes together created a unique culture, which has a direct and indirect impact on every continent" [8].

British philosopher Bertrand Russell emphasizes: "The superiority of the East was not only military. Science, philosophy, poetry, and all kinds of art flourished in the world of the Prophet Muhammad, while Europe was plunged into barbarism. Europeans, with their inexcusable narrowness of views, call this period the "dark age", but only in Europe it was "dark", in fact in Christian Europe, since Spain, which was Mohammedan (Islamic), had a brilliant culture" [23].

## **RESULTS AND DISCUSSION**

*Presentation of the main material of the study.* In the Islamic scientific world, unlike in medieval Europe, Muslim women had the right to receive education on an equal basis with men. For comparison: in the USA and Europe, women won the right to receive equal education on an equal basis with men only by the middle of the 19th century [1]. A biographical dictionary of twenty volumes on Muslim women scholars, written by al-Shakhawi in the fifteenth century, includes biographical data on 1075 Muslim women [10].

When The Times wrote in 1995 that Islam was responsible for the low level of education of women in the Muslim world, Muhammad Akram Nadwi began searching ancient Arabic manuscripts for the names of educated women or women scholars, hoping to find at least 20 or 30 names. Nadwi began his research by going through well-known and not-so-known hadith collections in search of female names. He studied the biographies and reports of various scholars about his teachers - men and women. What Muhammad Akram Nadwi found exceeded all his expectations. Sometimes one scholar wrote: "I studied with 70 women." Another narrated a hadith that was narrated by a total of 400 women. The extensive material he collected over the course of 20 years amounted to a 43-volume dictionary called "al-Wafa bi asma an-nisa", containing biographies of more than 10,000 women, which was published in 2021 in Jeddah. And in 2013, Nadwi's book *Al-Muhaddithat: The Women Scholars in Islam* was published in England, which is an English adaptation of the preface of this dictionary. Sheikh Muhammad Akram Nadwi writes: "I know of no other religious tradition in which women have been so represented and active in its history of formation."

For example, Rufaida al-Aslamiya is considered the first professional Muslim nurse. She was involved in the creation of the first ever mobile medical units to meet the needs of the community for medical care, led a group of volunteer nurses in the battles of Badr, Uhud, the Battle of the Ditch, Khaybar and other battles to treat and care for the wounded and dying. After the establishment of a Muslim state in Medina, the Prophet allowed a tent to be set up outside the mosque to treat the sick and train Muslim women and girls in the profession of a nurse. Rufaida al-Aslamiya is considered the founder of nursing in the Muslim world. In recognition of her contribution, the Aga Khan University established the College of Nursing and Midwifery, which bears her name. The University of Bahrain awards outstanding nurses with the annual Rufaida Al-Aslamiya Award. Jamia Hamdard University in Delhi established the Rufaida College of Nursing. It can be said that Rufaida Al-Aslamiya created the profession of nursing 1200 years before Florence Nightingale, who is considered the founder of modern nursing care [8].

The names of other Muslim women who were involved in healing and providing medical care have come down to us, these are Nusayba bint Kaab al-Mazenei, who cared for the wounded in the battle of Uhud (625); Umm Sinan al-Islami (also known as Umm Imara) - having converted to Islam, she asked the Prophet to allow her to go to war to treat the wounded and give water to

the soldiers; Umm Matawe al-Aslamiya - she volunteered as a nurse during the Battle of Khaybar; Umm Waraqa bint Haris, who participated in the collection of the Koran and treated the wounded during the Battle of Badr.

Al-Shifa bint Abdullah ("Healer") became the first Muslim woman to teach people literacy and traditional medicine practices. She was one of the first to convert to Islam in Mecca and joined the emigration to Medina. There she had a house between the mosque and the market. The Prophet often visited her and sometimes consulted with her about the best practice in business matters [3]. Another healer, the famous Ash-Shifa, also possessed qualified knowledge in medicine. She used prophylactic treatment against ant stings, the Prophet approved her method and advised her to teach it to other Muslim women [8].

Fatima al-Fihri became the founder in 859 of the mosque and madrasah under him (which is the oldest in the world) in Fez, Morocco. The Guinness Book of Records recognizes it as the oldest existing and continuously operating educational institution-university in the world [9]. The university curriculum included mathematics, Arabic, medicine, astronomy, chemistry, history and geography. These classes were available to both Muslim and Christian and Jewish youth. Al-Karaouine University is known for its famous graduates such as Abul-Abbas and the jurist Muhammad al-Fasi, who were outstanding Muslim thinkers of their time, the great Sufi and Islamic jurist Ibn al-Arabi, the historian and founder of sociology Ibn Khaldun, the famous geographer Muhammad al -Idrisi and astronomer Nur ad-Din al-Bitruji (Alpetragia). The famous Christian author and traveler Leo Africanus, the Jewish rabbi and philosopher Maimonides, and Pope Sylvester II were also among the graduates of Al-Qaraouine[12]. One of the first graduates was also Fatima al-Kabbaj, who later became the only female member of the Moroccan High Council for Religious Knowledge.

According to the UNESCO expertise, Al-Karaouine became the leading spiritual and educational center of the ancient Muslim world, whose graduates are still famous for their demand. Scientists, philosophers and theologians came out of its walls, who had a great influence not only on the development of the Muslim community, but also on the entire world culture. The university library is also considered the oldest continuously operating library in the world. In 2012, the Kuwait Arab Bank provided a grant to the Ministry of Culture of Morocco for the restoration of a unique object. The Moroccan government commissioned Moroccan-Canadian architect Professor Azize Chauni to renovate and restore the library to its former architectural glory. The restored library reopened its doors to the general public in May 2016.

Muslim women played a significant role in the development of the science of Hadith. Imam Hakim Naishapuri states: "1/4 of our religion depends on our Muslim sisters who conveyed the words of the Messenger of Allah salallahu alaihi wa sallam. If not for these transmitters, we would have lost a quarter of our religion."

Women could receive academic degrees and qualify as scientists and teachers [1]. Often women taught men. The well-known historian of Damascus Ibn Asakir (499-571 x / 1105-1175 m) wrote that there were ample opportunities for the education of women [7]. Ibn Asakir, said that he studied with more than 200 men and 80 women, but he received an ijaz (certificate of knowledge of a certain number of hadiths, or any collection, the right to teach these hadiths) from Zeynab bint Abdurrahman on Imam Malik's Muwatta .There are many such examples. For example, as various authors write, Jalal ad-Din as-Suyuti studied the "Risal" of Imam ash-Shafi'i with Hajar bint Muhammad, Afif ad-Din Junayd, a 9th century Hijri scholar, read "Sunan" ad-

Darimi with Fatima bint Ahmad ibn Kasym. Another prominent theologian, Ibn Hajar Askalani, in his work "Durar al-Karima" gives a brief biography of more than 170 female scholars of the eighth century AH, from whom he studied the science of hadith and other religious knowledge.

Women scholars also taught imams, who passed fatwas (religious and legal decisions). They traveled to distant cities. Some even went on lecture tours in the Middle East. The jurist and scholar of the 7th century Umm Ad-Darda taught law in the mosques of Damascus and Jerusalem. Her classes were attended by imams, legal scholars and hadith scholars. Her students were men, women and even the Caliph. Another 14th-century female scholar, Fatima al-Batayhia, gave lessons to men and women at the prophet's mosque in Medina, where people even came from the city of Fez in Morocco. Amra bint Abdulrahman was a well-known faqih (legal scholar), mufti and muhaddis (hadith scholar). Caliph Umar ibn Abdul-Aziz himself said that "if you want to learn the science of hadith, then you need to learn from Amra." Imam Zuhri, the author of one of the first Musnads, written collections of hadith, noted Amra as an outstanding expert on hadith and advised taking knowledge from her.

Aisha bint Abu Bakr, the wife of the Prophet Muhammad, is considered one of the seven greatest scholars of Islam of her time. She helped spread the message of Muhammad and served the Muslim community for 44 years after his death. She transmitted 2210 hadiths, both on matters related to the personal life of Muhammad, and on matters relating to inheritance, pilgrimage and eschatology. She is considered the most prominent specialist in Islamic jurisprudence. Aisha was engaged in mentoring, teaching people of different ages. Orphaned children who studied with her, she took on the maintenance. Many of her students later became well-known scientists, collectors of hadiths, experts on the Koran. She achieved high skill in versification, many poets sought to learn from her [2]. Other wives of the Prophet Muhammad like Hafsa, Maimun and Umm Habib were also narrators of hadith in the early centuries. A famous scholar of the early eighth century AH was Fatima bint Ibrahim bint Johar. Imams Dhahabi and al-Subki considered themselves her students, to whom she taught the collection Sahih al-Bukhari. Fatima's fame was so great that when she was on the Hajj, the Hadith scholars from Medina asked her to give them lessons at the Prophet's Mosque.

An outstanding muhaddith (expert in hadith) Aisha bint Abdul Hadi taught from the collection of al-Bukhari in the mosque of Damascus. Ibn Hajar al-Asqalani, recognized as one of the best Muhaddiths, came to Damascus on purpose to take lessons from her. With her, he studied over 100 books. According to him, she was considered one of the best experts on the hadith of her time. People from all parts of the Islamic world made long journeys to be able to learn from her. At one time, a woman named Karima bint Ahmad bin Muhammad bin Hatim al-Marvaziya (d. 463 AH / 1070 AD), originally from Turkmenistan, from the city of Merv (hence her nickname al-Marvaziya), enjoyed great authority. She was considered the best scholar of Sahih al-Bukhari in her time. From a young age, she traveled with her father to the Middle East - to Syria, Egypt, Hijaz and other famous centers of religious studies in search of knowledge. In the future, she becomes one of the leading authorities in Mecca for the transmission of hadith from the collection of Bukhari. She taught the text of al-Bukhari to students, and her scholarship and teaching were widely respected. Thirty-nine men and one woman submitted materials on her behalf.

Created by Karima al-Marwaziya, a copy of al-Bukhari's Sahih collection of hadith is considered to this day the most complete and accurate. Imam Ibn Jawzi writes that such scholars as Khatib al-Baghdadi, Ibn al-Muttalib, al-Samani and Abu Talib al-Zeynabi learned the collection

of Bukhari from her. A woman named Shuhda (d. 574 AH/1178 CE) is described as an expert in calligraphy and an eminent authority on the science of hadith. Her lessons on Sahih al-Bukhari and other collections of hadith were attended by a large number of students, and due to her high authority, many people called themselves her students. Zeinab bint Ahmad (d. 740 AH/1339 CE), better known as Bint al-Kamal, gave lessons on Abu Hanifa's Musnad, Shamail Tirmidhi and at-Tahawi's Sharh Maani al-Asar . The well-known historian Ibn Batuta, when he was in Damascus, studied the science of hadith with her and some other women scientists. Umm Hani Maryam (years of life 778-871 AH / 1376-1466 AD) studied theology, fiqh, history and grammar, went to gain knowledge of hadith in Cairo and Mecca. Subsequently, she taught at the great madrasah of Cairo, giving ijazas to many scholars.

The manuscript "al-Mashihat ma at-Tariq" (sheet 238) of Ibn al-Bukhari states that a course of 11 lectures, where the total number of students was more than 500, was attended by a large number of women, and this course was read by a man in the Umayyad mosque in Damascus in 687/1288.

Further in the same manuscript (sheet 40) it is said that many women attended another course, of 6 lectures, which was read by ibn al-Sayrafi to an audience of 200 people in Aleppo (Aleppo) Syria, in 736/1336. Sheet 250 indicates, that a hadith scholar named Umm Abdullah gave a course of 5 lectures to a mixed audience, that is, there were both men and women together, a total of 50 people, and this happened in Damascus in 837 AH / 1433. In the notes to the book "Kitab al Kifaya" by Al Khatib al Baghdadi, and a collection of his commentaries on hadith, the names of Nima bint Ali, Umm Ahmad Zeinab bint Al Makka and other women scholars who lectured on these two books appear. Sometimes they taught on their own, sometimes together with male hadith scholars. Lectures were given to students at leading universities such as Aziziyah and Diayyah. Some lectures were attended by Ahmad, the son of the famous commander Salah ad-Din.

Information about female hadith scholars is contained in the biographical directory of famous people of the 9th century "ad-Daw-al-Lami" by Muhammad ibn Abdurrahman al-Sahavi (830-897 / 1427-1489), as well as in the work "Mujam ash-Shuyukh" by Abdul- Aziz ibn Umar ibn Fahd, compiled in 861 and dedicated to the biographical data of more than 1100 teachers with whom the author studied, the names of more than 130 women are mentioned. The fact that women taught such men, who were themselves scientists, emphasizes the status and respect for these women.

## **CONCLUSION**

To the question why, despite the large number of women scientists with unique knowledge, they are almost not remembered today? Akram Nadwi explains this phenomenon with the following example: "One of the great Islamic scholars, Ibn al-Samani, who lived in the 13th or 14th century, wrote that he wanted to study with a woman named Karima: "I asked her brother many times to let me study with her . But he always made excuses [for not letting me do it]." The problem is that if someone had a son or brother, they tried to do everything to make them known, they became famous. But if there was a sister, they preferred to hide her."

Sheikh Muhammad Akram Nadwi, after more than 20 years of research, came to the conclusion that Islamic scholars first began to oppose women when they began to study philosophy. Aristotle was convinced that the subjugation of women was "natural" and "beneficial to society." This idea greatly influenced Muslim scholars who developed medieval fiqh - the theory

of Islamic law. Before getting acquainted with the idea of Aristotle and before the medieval scholars were strengthened in their opinion about the gender distribution of roles in society, initially Islam endowed men and women with much greater rights and equality.

In order to find the reasons for the emerging questions about the attitude of Islam towards women, Aisha Abdurrahman Bewley, who converted to Islam, the author or translator of books on Islam, and, together with Abdalhak Bewley, translated the Koran into English, conducted a special study, which resulted in the book "Islam: empowering women. She noted: "Looking through biographical directories, I was surprised to find many references to women. This is a huge number of women, represented in all areas, from scientists to rulers, regents or independent rulers, women who have had a significant impact on politics. In 2004, she published a book on women scholars of Islamic civilization, *Muslim Women: A Biographical Dictionary*. The comprehensive information collected in it about Muslim women from the first century AH to the middle of the 13th century AH proves that during these 14 centuries Muslim women have always succeeded in the field of science and business, without abandoning their traditional roles of wives and mothers.

The decline of Islamic culture began in the New Age, when many Muslim countries fell into colonial or semi-colonial dependence on the capitalist states of Europe. Hence the underestimation of the cultural heritage of Islam, its valuable ideological foundations for the world and the formation of man. The achievements of Muslim scientists were forgotten, educational institutions fell into decay, primitive forms of understanding the world began to be implanted among the people.

Since the end of the 20th century, a one-sided interpretation of Muslim principles and ethical norms, Islamic fundamentalism and extremism has intensified. The media most often associate terrorist acts with Islam. There are few works devoted to the important role of Muslim scientists in the development of science, culture and education in the early Islamic world, about their great contribution to the knowledge of the modern world. Meanwhile, Muslim scientists today are becoming leaders in their field of knowledge, making a great contribution to the knowledge of the world. Every year the number of women who have defended diplomas in scientific specialties is increasing. According to UNESCO, in some countries of the Islamic world, there are already more women than men among graduates of higher educational institutions.

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