INTRODUCTION

The Institute of Manuscripts of the Azerbaijan National Academy of Sciences is a center for collecting, systematizing, storing and publishing medieval manuscripts. It currently holds about 40,000 documents, including 11,000 manuscripts, in languages that include Azeri, Turkish, Uzbek, Persian and Arabic. These texts help us understand what people from the Middle Ages thought about medicine, astronomy, mathematics, poetry, philosophy, law, history and geography.1-4

The basis for the Institute was laid in 1924, when a regional congress was held in Baku. The Congress decided to organize a scientific library with a special department dedicated to ancient manuscripts and rare books. Initially, this library was part of the Investigation Society of Azerbaijan; it was subsequently attached to the Nizami Institute of Literature. In 1950, the Manuscripts Fund became the Independent Center of Scientific Research. In 1986, its name was changed to the Institute of Manuscripts.

Many of the ancient medical manuscripts found at the Institute came from the private collections of Azerbaijan's most prominent 19th- and early 20th-century thinkers, including Abbasgulu agha Bakikhanov, Mirza Fatali Akhund-zadeh, Abdulgani Afandi Khalisagarizada, Husein Afandi Gaibov, Bahman Mirza Gajar and Mir Mohsun Navvab. The Institute continues to collect manuscripts, rare books and historical documents from all over Azerbaijan.

The Institute is located in the former Alexandrian Russian Muslim Female Boarding School, which was built by Haji Zeynalabdin Taghiyev between 1898 and 1901 AD. The building was designed by the Polish architect Joseph V. Gosлавski (1865-1904).4

UNIQUE MEDICAL MANUSCRIPTS

In order to ascertain the total number of manuscripts on medicine and pharmacy, the author of the present work examined the funds and catalogs of the Institute. This examination revealed that the Institute's collection includes 363 medieval manuscripts and 27 old printed books on medicine and pharmacognosy written in the following languages: Persian - 222 manuscripts, Turkic (Old Azeri and Old Turkish) - 71 manuscripts, and Arabic - 70 manuscripts.4

All the sources studied can be divided into the following categories:

1. Fundamental medical encyclopedias or pharmaco-poeias that throw light on all questions of theoretical and practical medicine or pharmacognosy.

2. Small medical encyclopedias and short reference books on pharmacognosy.
3. Different treatises devoted to separate scientific questions.
4. Anonymous notebooks and separate pages containing recipes or quotations from different, often unknown, sources.

Among the sources that belong to the first category we should note such fundamental works as: "al-Kanun fi at-Tibb" by Abu Ali Ibn Sina (980-1037 AD), "Kitab al-Hawi" by Abu Bakr ibn Zakariya ar-Razi (865-925 AD), "Jami' al-Bagdadi" by Yusif bin Ismail Khoi (d.1311 AD), "Jami' al-Adwiyya" by Ibn al-Beithar al-Andalusi ([13th] century AD), "Tuhafat al-Mu'minin" by Sayyid Muhammad Mu'min (d.1697 AD), "Mahzan al-Adwyya" by Muhammad Huseyn Khan Samarkandi (18th century AD), etc.

Books belonging to the second category are also very valuable for studying the problem. They include: "Kitab al-Hafi Ilm al-Madawi" by Mahmud bin Ilyas Shirazi (13th century AD), "Kifayyat al-Mujahida" (1523 AD) by Mansur bin Muhammad, "Jami' al-Fawa'id" (1511 AD) by Yusif bin Muhammad al-Harawi, "Dastur al-Alaj" by Sultan Ali Khorasani (16th century AD), "Siraj at-Tibb" by Hasan bin Riza Shirvani (17th century AD), "Fawa'id al-Hikmat" by Haji Suleyman Kajar Iravani (17th century AD), "Tibbnama" (1711 AD) by Mansur bin Muhammad, "Jam' al-Fawa'id" (1511 AD) by Yusif bin Muhammad al-Harawi, "Dastur al-Alaj" by Sultan Ali Khorasani (16th century AD), "Siraj at-Tibb" by Hasan bin Riza Shirvani (17th century AD), "Fawa'id al-Hikmat" by Haji Suleyman Kajar Iravani (17th century AD), "Tibbnama" (1711 AD) by Muhammad Yusif Shirvani, and "Manafe' an-Nas" by Muhammad Attar Salyani (18th century AD).

Considerable information about aspects of the medieval concept of health protection may also be found in works that belong to the third category (so-called treatises). As mentioned above, they deal with individual scientific issues and are therefore not universal medical books (encyclopedias). They throw light on individual branches of medicine including pediatrics, anatomy, surgery, ophthalmology, gynecology, psychology, dietology, etc. Among them are following sources: "Kitab al-Jarraihi" by Abu al-Qasim az-Zahrawi (13th century), "Hirga" by Murtaza Gulu Shamlu (17th century), "Kitab-i Ruju' ash-Sheykh dar Tagviyyat-i Bah" by Sheykh Ajal ash-Sharif (17th century), "Zad al-Musafirin" (written in 1729 AD) by Muhammad Mahdi bin Ali Nagi, "Mualijat-i Munfarida" (written in 1775/6 AD) by Abu al-Hasan Maragi, etc.

Few of the writings belonging to the fourth category (separate pages and anonymous notebooks dated mainly late 19th - early 20th centuries) are of significant scientific interest.

All the manuscripts mentioned have been collected from various regions of Azerbaijan. They belonged to local owners and have been copied in our country. The books mentioned were widely used by medieval physicians, so these writings may be considered the most popular medical books of medieval time.

**MEDICAL MANUSCRIPTS IN THE MEMORY OF THE WORLD PROGRAMME OF UNESCO**

1. **CANON BY IBN SINA**

The Manuscript Institute is fortunate to have some real treasures in its collection. For example, it preserves one of the oldest copies of the second volume of the “Canon of Medicine” (1030 AD) by Ibn Sina, known in the West as Avicenna (980-1037 AD). The manuscript was copied in 537 Hijra (1143 AD) in Baghdad.3

This second volume is primarily devoted to pharmacology. It contains pharmaceutical descriptions of hundreds of natural medicines: plants, minerals and animal substances. The manuscript is unique in that it is one of the oldest manuscripts of “Canon” in existence, and was copied only 106 years after the author’s death. Avicenna's manuscript is considered the most reliable in the world. The second volume of “Canon of Medicine” was translated into Uzbek and Russian from the abovementioned Baku manuscript (Tashkent, 1982).5

Avicenna, born in the town of Afshana nearby Bukhara (of Old Persia, at the present-day Uzbekistan), carried out many of his medical observations later, in Persia and Azerbaijan. "Canon", an encyclopedic work in Arabic, is considered the single most famous book in medical history, both in the East and in the West (as cited in the Encyclopaedia Britannica).

During the Middle Ages, the “Canon of Medicine” influenced the development of medical sciences in the whole Muslim World and Christian Europe. In the 12th century AD, the Canon was translated from Arabic into Latin by Gerard of Cremona (1140-1187 AD) and used as a medical textbook in European universities. The book was held in such reverence that Michelangelo was recorded as saying: "It is better to be mistaken following Avicenna than to be true following others".7

The manuscript is written on thick white paper. The text is black, and the titles are written in red ink; the format: 18x20 cm, number of leaves: 186.5

2. **"ZAKHIRAI-I NIZAMSHAHII" BY RUSTAM JURJANI**

This book was written in the 13th century and imitates the famous medical book by Zeynaddin Jurjani. Rustam Jurjani's manuscript is unique; it is the only manuscript of this book in the world.

“Zakhirai-Nizamshahi” by Rustam Jurjani is an original work resembling “Zakhirai-Kharazmshahi” by Zeynaddin Ibn Abu Ibrahim Jurjani (12th century). The manuscript is not found in other manuscript deposits anywhere in the world; at least, its name does not appear in any other known catalogue. The date of compilation is not known, but the manuscript was copied in the 16th century AD (954 Hijra). The book provides descriptions of the pharmaceutical properties of medicinal herbs, animal substances, minerals and complex medicines. It influenced the development of medicine and pharmacology in Persia and Persian-speaking countries. The work is preserved as a manuscript and has still not been translated and published.

The manuscript was written in Nasta’lik script on white paper in black ink. The titles are written in red ink. The binding is of black leather. The first page is
decorated with an ornament; the format: 16x25 cm, number of leaves: 487.8

3. “AL-MAQALATUN SALASUN” BY ABULKASIM ZAKHRAV

Al-Maqalatun Salasun is a comprehensive book about “Surgery and Surgical Instruments” written in Arabic. This manuscript is one of the rarest and most ancient manuscripts of this book in the world. The book contains pictures of approximately 200 medieval surgical instruments. Zakhravi (who died in 1013) is the only medieval author who provided pictures of so many surgical instruments, and explained their methods of application. This work influenced the development of surgery in the Muslim East and Europe. Abulkasim was born in Andalusia (Spain) when that country was under Arab rule. For many centuries, Zakhravi’s book was the most authoritative textbook on surgery both in East and in West. In medieval Europe, Abu al-Qasim was known as Abulcasis or Albucasis (the Latinized form of "Abulkasim").9 Al-Zahrawi wrote a medical encyclopedia spanning 30 volumes that included sections on surgery, medicine, orthopedics, ophthalmology, pharmacology, nutrition, etc. This book was known as al-Tasrif and contained data that al-Zahrawi had accumulated during a career that spanned almost 50 years of training, teaching and practice. He apparently traveled very little but had wide experience in treating accident victims and war casualties.

The most importance treatise is the one on surgery. This monumental work was the first in Arabic to treat surgery independently and in detail. It included many pictures of surgical instruments, mostly invented by al-Zahrawi himself, and explanations of their use. Al-Zahrawi was the first medical author to provide illustrations of instruments used in surgery. There are approximately 200 such drawings ranging from a tongue depressor and a tooth extractor to a catheter and an elaborate obstetric device.

The Baku manuscript represents the thirtieth volume of the book. This volume was translated into Russian and published in Moscow in 1983.10 It is written with Naskh and Kufi on white paper in black ink. The binding is of black leather. The manuscript was copied at approximately the end of the 12th century; the format: 18x24 cm, number of leaves: 459.11

REFERENCES