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FROM THE HISTORY OF MEDICINE AND PHARMACY

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Bosnian Franciscans and the Monasteries in Kresevo and Fojnica as Source of Scientific Bibliography

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ABSTRACT

All of these centuries-old records contain enormous treasures, and the modern medicine is increasingly searching for the sources of natural remedies. The Franciscans should be credited for carefully collecting the methods folk treatment and passed them on to future generations. In the words of Br. Marko Karamatić: „The fact that the Friars were engaged in healthcare, that they became the first graduate doctors in Bosnia and Herzegovina, that they wrote“ herbal manuals „and other medical records, is the result of historical opportunities in these areas, and this activity became one of the most important tasks for the Franciscans. They performed their duties regardless of the circumstances.

Keywords: Franciscans, Pharmacy books, Bibliography.

gradually observed their healing properties. Since they did not have much knowledge about the causes diseases or which herb and in what way could be used for treatment, it was all based on experience (5-8).

Over time, the reasons for using specific medicinal herbs for certain diseases were discovered so that drug use gradually came out from the empirical framework and was based on explanatory facts. For a long time, plants have been a basis for treatment and prophylaxis. Thus, the first physicians and pharmacists began to emerge, of course, all in one person. In Yugoslavia, pharmacy occurs in the second half of the 13th century and stands, somewhat, under the influence of the West, especially Dalmatian cities, but also under the influence of Byzantine empire. Hence a very uneven development of pharmacy begins in certain regions. The bearer of Western influence is the city of Dubrovnik with other towns along the Adriatic coast, and our first apothecaries were settlers. From Dalmatia, this influence extends into Croatia (Zagreb), while in Bosnia it operates sporadically, as well as in Serbia. A Higher level of pharmacy begins to occur in the eastern parts much later than in the West, mainly after the liberation from the Turkish occupation (mid 18th and early 19th century).

Out of all the provinces of former Yugoslavia, Bosnia and Herzegovina was most influenced by the East (1-3). Bosnia and Herzegovina has shown uniqueness in its development, which also manifested in the development of its medicine and pharmacy (4).

Numerous medical books in Latin, Greek, German and Italian have been arriving at our country, but such books could only be read and understood by Christian clergymen, especially

1. INTRODUCTION

In the development of human race, starting from the prehistoric age of human history to the first written sources that have been found and preserved up until modern times, that is until today, people have gained and are gaining more and more experience in the treatment and preparation of medicines (1-4). This is proven by the oldest written sources that deal not only with the way of finding and describing various illnesses, but also by mentioning some medications, which is why we have modern literature necessary for any pharmacists or physicians work. Humans have always been exposed to injuries, illnesses and epidemics, and it's in the very nature of a man, in the case of an illness, to try to find the means to fight it and to find help and relief from his aches.

Using herbs in everyday nutrition, human

Franciscans. The Franciscan Order was spreading very rapidly, and by 1260. there were eight Franciscan Custards in Bosnia and Herzegovina (a district with only a several monasteries). Already upon their invitation, they were instructed to provide help and medical care to their fellow citizens irrespective of religion or national affiliation.

2. PHARMACY AND MEDICINE

A long time ago, the history of pharmacy was closely related to the history of medicine, and as a matter of fact, pharmacy was a part of medical science since the earliest times, up until to the middle ages. The doctor, therefore, was at the same time a doctor and a pharmacist. Nevertheless, the history of pharmacy dates from the earliest times, the times when people were at the lowest level of culture. For this reason, we can say that pharmacy is as old as humankind (1).

The first pharmacies are established only after the flourishing of Arab culture.

In the year of 754, the first pharmacy in the world was established Baghdad, and later on, pharmacies were opened in Spain, Italy, and generally throughout Europe. Almost 5 centuries after the foundation of the first pharmacy, in 1240, King of Sicily Friedrich II issued an edict that separates pharmacy from medicine.

This year is very important for what will follow, and that is the development of pharmacy as an independent science/discipline (2).

However, long after the separation of pharmacy from medicine, doctors continued to develop and issue medication to patients after the examination. A small number of doctors whose services were expensive and unavailable to most people made it possible for pharmacists, alongside drug therapy, to provide advice to the sick and often prescribe therapy. Until the 16th century, the relationship between rivalry and competition was dominant, as evidenced by the preserved texts of mutual accusations. It is only the awareness of the fact that a well-made drug speaks about the expertise of a pharmacist and determines the success of treatment and consequently the doctor's success, has changed the relationship between the physician and the pharmacist.

3. THE DIVISION OF PHARMACEUTICAL HISTORY

Pharmaceutical history can be divided into two main periods (1, 2):

- 1) The ancient era, when it was an integral part of medicine;
- 2) The period when it developed into an independent science and profession (1).

Another way of dividing the pharmaceutical history of Bosnia and Herzegovina is characterized by six periods that are mutually different due to cultural features, although with a large number of common features:

- 1) Period of autonomous Bosnian state
- 2) Period of Turkish rule
- 3) Period of Austro-Hungarian rule
- 4) The period of old Yugoslavia
- 5) Period of Socialist Yugoslavia
- 6) Period of the new Bosnia and Herzegovina state

Bosnia and Herzegovina was under the influence of different cultures and civilizations, which entails the specificity of treatment and the hygienic habits of the areas they come from (4).

Both folk medicine and pharmacy were transmitted and preserved by word of mouth on one side, while on the other side, our predecessors wrote the rules for treatment, which means medicines of folk medicine and pharmacy were assembled into manuscripts called „pharmacies”, which we will about talk later (4).

3.1. THE ARRIVAL OF FRANCISANTS

During the reign of Stjepan II in Bosnia Catholic Church grew stronger and was assisted by the church orders, of which the most famous ones were the Franciscans. The first appearance of this church order in Bosnia and Herzegovina was in 1291. In their new homeland, they found difficult living conditions and low education, which favored the development of various diseases. At the time plague was very widespread and the Franciscans began treating patients immediately, besides their mission of well-doing.

In addition to that, they were folk enlighteners (5, 6).

3.2. FRANCISCAN LEGACY

The Franciscans brought the knowledge of medicinal herbs with them, and were devoted and self-reliant for a number of centuries, even though a large amount of time passed until the world had learned about the work of our Franciscans (6).

3.3. FRANCISCANS AND MEDICINE

There are numerous records of the health service of Bosnian Franciscans, though many of were probably destroyed along with the libraries in the past war. Mehmed-beg gave permission for the Franciscans to treat Muslims in 1708, when he issued an official permit to the Franciscans in Kreševo, which is now considered as a very important document. Because of them, many people possessed their own „pharmacists“, and only if they were not enough, they would ask for help from friars. (6) Generally, Bosnian Franciscans were self-taught doctors. It could be said that they learned the craft from older and better-trained monastery surgeons or apothecaries, but later there were those who completed their studies at a medical school abroad (6, 7). Immediately after their arrival in Bosnia and Herzegovina, which means even during the time of the independent Bosnian state, they began treating patients. In addition to the treatment, they also provided written prayers (inscriptions) that were carried by the patients around their necks, so they found great trust in the Muslims on the basis of these records. Some of them wrote about their profession, and they did not only treat patients, but also tried to teach others about their profession. As far as trust is concerned, even the foreigners in Bosnia found Franciscans more reliable than the local „gobs“ (7).

3.4. FRANCISCANS DURING THE EPIDEMIC

Franciscans—doctors were particularly popular during the plague epidemic. Still, it was hard for them to do anything against plague because Medicine was not developed enough during those times to know how to deal with this epidemic. However, by treating individuals, advising on hygiene, separating household members from infected people, treating with anti-febrile and laxative agents, they got the reputation of being great doctors and being beneficiary for the people (1).

4. PROMINENT FRANCISCANS (PHARMACIST—DOCTORS)

Br. Petar Bustrović (who completed medicine in Rome around 1710) was one of the first Franciscans involved in medi-

cine and pharmacy. Besides him, other well-known Franciscan pharmacists–doctors were: Br. Franjo Gracić (1720–1799) who studied medicine in Italy and Austria, Br. Mato Nikolić (1784–1844), Br. Petar Marešević from Kreševo, who graduated in Vienna in 1836, Br. Tadija Lagarić (1761–1840), Br. Nikola Ilijic (1767–1840) and Br. Lovro Sušić, a pharmacist–doctor from Livno.

Most of them advised isolation during plague epidemics and quarantine, and fumigated their homes and churches with the smoke of burning fir tree. There are records that suggest that the population of Gračanica was relocated to other regions and pine trees were burned in that general area.

4.1. BR. MATO NIKOLIC, THE FIRST PHARMACY

An interesting fact is that in 1813 the Franciscan Provincial for Bosnia and Herzegovina ordered the guards of Kreševo, Fojnica and Kraljeva Sutjeska monasteries to give Br. Mata Nikolic from Kreševo 500 groschen for the purpose of:

- 1.) Using this money to set up a pharmacy with all the necessary medicines;
- 2.) to buy medical and pharmacy literature overseas;
- 3.) to buy all the necessary medical instruments.

This amount was supposed to be given every year. Br. Mato Nikolić is, therefore, the first qualified pharmacist in Bosnia and Herzegovina, and his pharmacy can be considered as the first pharmacy that was made in an “European” stile in our country.

4.2. HERBAL MANUALS

Many Franciscans and priests are credited for collecting folk remedies and composing “herbal manuals”. The regulations for the treatment and remedies of folk medicine and pharmacy, were collected in special manuscripts, which are referred to as “herbal manuals”. In those “herbal manuals”, it was recorded how our people treated their illnesses and how they were treated themselves in case of absence of doctors, pharmacists or pharmacies. They have been compiled, supplemented and modified through centuries by educated doctors and they have been anonymously passed on from one generation to another, so it is difficult to determine the place or the date it was first created, as well as the course they took in their making. They represent precious material not only for the knowledge of folk medicine and pharmacy, but also for history and medicine and pharmacy, as they contain not only the oldest treatments and medicines, but also newer methods in the form of supplementary additives (1).

Some herbal manuals have been discovered, published and interpreted, and those that originate from these areas were made in the age of Medical decantation and have a bibliographic value.

Herbal manuals are old, mostly handwritten collection of regulations and instructions on how and by which means a patient should be treated... It is necessary to state out that there are no scientific terms in them, and they name only symptoms, ailments and medications without any system or order, and are determined according to these terms. They are written in Bosnian Cyrillic, New Cyrillic, Latin and Arabic, and the spelling is very diverse. Herbal manuals are recognized by a writer who collected or transcribed the collection of those recipes, or the publisher and the location where it was found (1).

4.3. MOST PROMINENT HERBAL MANUALS IN BOSNIA AND HERZEGOVINA

JAGIĆ'S HERBAL MANUAL

One of the oldest herbal manuals was created by Jagić, and it is located in the Czech National Museum in Prague as Šafarik's legacy. It's of Greek origin, the consists mostly of herbal medication, and less medication of animal or mineral origin.

MEDIĆ'S HERBAL MANUALS

A total of seven of them were published by Mojo Medić, and they have different origins. They were written in the late 17th and early 18th century in Cyrillic Bosnian and Latin.

SIMIĆ'S HERBAL MANUAL

It was written by a Franciscan named Luka Simić from Foča (near Derventa). He described some medicines and wrapped them in secrets that not every man could understand, especially if he was uneducated.

PRODANOVIĆ'S HERBAL MANUAL

It was written by a priest named Đorđe Prodanović in 1840 in Foča.

FILIPOVIĆ'S HERBAL MANUAL

This herbal manual originates from Tešanj, and it was published by Dr. Milenko S. Filipović in 1973. It has 24 herbs. This pharmacy is called “prtokol”, and its first owner was Sima Krstić from Tešanj. It was written in Cyrillic in Tešanj somewhere around 1835.

KULENOVIĆ'S HERBAL MANUAL

The herbal manual of Murat-beg Kulenović from Bos. Petrovac, is made up of two parts written in the old Slovenian script.

FRANCISCAN HERBAL MANUALS

Bosnian Franciscans wrote or rewrote works about treating various diseases in humans and animals. Franciscans based these books on the narrations of folk pharmacist-doctors, but there are also those that have been rewritten, for example, Br. Drapulić's, ‘ Science of giving medications ,’.

4.4. HERBAL MANUALS WRITTEN IN TURKISH LANGUAGE

There are many herbal manuals in Bosnia and Herzegovina which were written in the Turkish language. A few of them are kept in the Central Hygienic Institute in Sarajevo. Our professor Dr. Šaćir Sikirić has translated most of them into our language. One of the most popular Turkish herbal manuals in Bosnia is that of Niday. Apart from this major work, „MENAFIUN-NAS“ (benefits for people), Nidai has written several other medical works, as well as works about veterinary medicine and ethics (1).

Herbal manual “Domestic Doctor”

It is very important to note that in 1868 Br. Mijo Nikolić (1825–1874) wrote the book „Domestic Doctor“, which is considered to be the most complete herbal manual, and in 1971 it was almost entirely published by the National Museum in Sarajevo (6).

The Franciscans were available to all people regardless of nationality and religion (6).

The Franciscans have more or less cleansed their treatment from superstition, differing from Orthodox and Muslim, and even Catholic treatment, but in the use of folk remedies, however, they resorted to supernatural means (1).

Figure 1. Registers of franciscan monasteries

Figure 2. Monasteries in the XV century

5. OTHER MANUSCRIPTS

In addition to numerous handwritten herbal manuals, the Franciscan manuscripts chronologically, in detail, describe all the events of their time, from the establishment of some monasteries until today. Franciscans have written their knowledge about everything and they are the authors of many herbal manuals (which were already mentioned), annals, books, documents, etc. A large part of Franciscan monasteries in Fojnica, Kreševo, Olovo, Široki brijeg, Visoko and Sutjeska possessed works written in many parts of Croatia (Slavonia, Like, Dubrovnik, Pokuplje, Dalmatia, Međimurje) as the records used by the Friars of Bosnia and Herzegovina in the daily religious prayer and as national readings from which the motives for their own creation were drawn. The Bosnian Franciscan literature covers the following areas:

- religious works
- monastic annals
- poems
- the first historical works
- lexicographic works
- linguistic works

Bosnian Franciscans most commonly call their language Slovenian or Illyrian, but also sometimes Bosnian or Croatian (5).

The Franciscans have increasingly enriched their libraries

Figure 3. The monument room of Br. Mars Martić.

with foreign books, especially those of medical content, most often from the Italian or German speaking areas. In time, rich monastery libraries were created, most of them in Kreševo, Jajce, Kraljeva Sutjeska, Fojnica and elsewhere.

Even the first magazine in the territory of Bosnia and Herzegovina is founded by Franciscan Francis Jukić (middle of last century) called „a Bosnian friend“, where numerous instructions on preserving health and the treatment of illness are printed (6).

Franciscans from the three old monasteries (Fojnica, Kreševo and Kraljeva Sutjeska) handed over valuable artworks and documents to Strossmayer's Bishop of Poznan for safe keeping, until Bosnia frees itself Turkish occupation. One part of it has never been returned and is still in the HAZU gallery in Zagreb. The three mentioned monasteries are the richest in Bosnia and Herzegovina by means of older works of art, books and other objects of cultural and historical significance (8).

6. FRANCISCAN MONASTERIES

With the arrival of the Franciscans in Bosnia in the late 13th century, the first monasteries were erected and established. The first monastery was established in Srebrenica, causing the province to later be named after it as Bosna Srebrenik or Bosna Srebrna, lat. Bosna Argentina. The Bosnian Franciscans were members of the Franciscan Province of Bosna Srebrna, while in the beginning, the members were mainly foreigners: Germans, Italians, Hungarians. Numerous monasteries have been built in this area, and they remain intact in the territory of Bosnia to this date (5).

KREŠEVO MONASTERY

In the central part of Bosnia, in a small town called Kreševo, there is a Franciscan monastery along with the church of St. Catherine. It was founded at the end of the 14th century.

After the Bosnia fell under Turkish rule, in 1534 the monastery and the church were demolished, only to be rebuilt and then restored in 1763. The monastery and church were burned down again on April 7, 1765. After two years of appealing, the Franciscans received approval and started rebuilding it again. However, due to inadequate construction, the church was demolished again, and the present church was again rebuilt between 1963 to 1970. Even though the monastery was demolished numerous times during the turbulent centuries of Ottoman rule, the Kreševo friars managed to gather rare,

valuable and interesting exhibits.

7. MONASTERY MUSEUM

The Friars strived towards gathering all that is of interest to culture, history and the way of life in the monastery area. Thus, the Franciscan monastery contains valuable paintings, artwork made of silver or gilded artwork and mass vestments.

The museum owns a collection of copies and originals of significant historical documents:

- a letter of charter of King Tomaš Dubrovčanin from 1444,
- prince Juraj Vojsalić's documents (1434),
- a permit for the repair of the vassal monastery of Selim issued in 1767,
- copies of the "Ahdname".

The monastery archive contains old documents, chronicles and writings, including a handwritten book of Nikolaus de Padna from the 15th century, and a valuable legacy of Br. Mars Martić. The archives contain the written legacy of many famous Franciscans who once worked in the Kreševo, in Latin, and our the national language, and those written in bosančica (10).

8. LIBRARY OF FRANCISCAN MONASTRY

Books are collected and carefully kept for centuries. For a monastery, the library represents its brain and heart, holiness, inspiration – its center. Library of the Kreševo Monastery has around 22.000 books written in different languages. They address all topics, from astronomy, theology to medicine (7-22). This monastery contains about 15.000 unique pieces. Rarity contained in this library is best shown by the handwritten theological collection from the 12th century. Straban's geography was preserved as well, translated from Greek to Latin language in 1480 (10).

From the fields of medicine, the library has descriptions and healing properties of various herbs and recipes, that is, pharmaceutical-medical work written in Latin language by Mattili in the 16th century. The healing properties of various herbs and numerous prescriptions from folk remedies are explained in great detail. This library preserves the rare work of Gregorius Agricola called "De re metallica" (about shackles), which was printed in 1657. Various documents describing the history of the Franciscan legacy of the native Franciscans are also a big part of this library. Their herbal manuals are a written testimony and proof that Franciscans from Kreševo practiced medicine and healing. 29 of them are still preserved in the monas-

Figure 4. AHDNAMA - charter of Turkish Sultan Mehmed II the Conqueror

tery archives, while the best of them have disappeared. Br. Mijo Nikolić's herbal manual was found in Široki Brijeg and it is considered to be the most complete and the most elegant one of them all.

9. FAMOUS FRANCISCAN PHARMACISTS

The famous Franciscans from Kreševo that practiced medicine and prepared medication are:

- Br. Tomo Dafinić
- Br. Franjo Gracić
- Br. Nikola Ilijić
- Br. Mato Nikolić
- Br. Mirko Mačuga
- Br. Mijo Nikolić and many others

10. FOJNICA MONASTERY

The Franciscan monastery in Fojnica represents a church and a monastery built in the 14th century. With the arrival of the Franciscan Order in Bosnia and Herzegovina, the construction of the Fojnica monastery begins, in the northern part of Fojnica, PAZARNICE. The remaining part of the monastery was built in 1863 and it contained a library and a museum. In July of 2000, this part of the monastery was demolished, and the construction of a new building for a library and a museum began in its place.

10.1. THE FOJNICA MONASTERY MUSEUM

This museum contains a book called "Fojnički Grbovnik" (Fojnica's coat of arms book), and it is the only collection of coats of arms which is preserved on the Bosnian and Herzegovinian territory. In the museum, besides the coats of arms, there are different collections of archival records, museum treasures, valuable old books and artistic paintings.

10.2. ARCHIVE

Br. Leonardo Čuturić has been working on stacking and arranging archives and he divided it into 23 groups according to document content:

- Documents related with Fojnica
- Documents written using only capital letters in Bosančica
- Things from personal lives of Franciscans
- About education
- About the regions of the Fojnica district
- Biographies of Fojnica's prominent citizens
- Fragments from various archives
- Chronicles and letters, etc.

Turkish documents represent a special group, there are 3000 of them with a short indication of their content on the back of the documents. A Large segment of these documents was published by Josip Matošević.

Ahdnama is the charter made by Sultan Mehmed II the Conqueror given to Br. Anđel Zvizdović in 1463. There is also "Bujrultija of Skender-pasha" from 1486. Monastery library counts around 40.000 titles, and the museum collection composed of a large amount of very valuable and very old exhibits sorted in several thematic collections. The most important of them are:

The collection of Zvizdović together with "AHDAMA", given cloak, "Bujrultija" of Skender-pasha, the painting of Zvizdović and record a tablet as it's frame

- The collection of Miletić

- Bosnian – Franciscans collection
- Red collection
- Numismatic collection

10.3. AHDNAMA

During the reign of Ottoman Empire in Milodraž, located between Fojnica and Visoko, on May 28th 1463, Turkish Sultan Mehmed II the Conqueror gave Br. Anđel Zvizdović a ceremonial charter AHDNAMA which authorizes the work Franciscans and freedom of faith to Catholics in Bosnia, and allows for the Franciscans who escaped to return. It was a form of document that guaranteed peace and freedom to Bosnian Franciscans and Catholics

10.4. THE PICTURE GALLERY

Around 20 oil paintings made between 18th and 19th centuries are hung on the Fojnica Franciscan monastery's walls and inside the church. Most of them were made in Italy and Dalmatia, but some of them were created by the native painters. The most important ones are:

Immaculate Conception

Prayer for the Salvation from the Plague (Painted areas by the author Sebastian Devite from Split in 1784 during the plague epidemics in these areas).

Another important piece is the Saint Antun Pustinjač, the protector of Fojnica from typhus disease, created by Br. Mijo Čujic in 1800. Also, the gallery contains portraits of Br. Augustin Miletić, Saint Ana- Marija, Madona with Christ, Saint Andrija, Christ's crucifixion, etc..

11. CONCLUSION

All of these centuries-old records contain enormous treasures, and the modern medicine is increasingly searching for the sources of natural remedies. The Franciscans should be credited for carefully collecting the methods folk treatment and passed them on to future generations. In the words of Br. Marko Karamatić: "The fact that the Friars were engaged in healthcare, that they became the first graduate doctors in Bosnia and Herzegovina, that they wrote" herbal manuals "and other medical records, is the result of historical opportunities in these areas, and this activity became one of the most important tasks for the Franciscans. They performed their duties regardless of the circumstances (6).

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REFERENCES

- Djuricic A, Elazar S. Pregled istorije farmacije Bosne i Hercegovina. Sarajevo, 1958.
- Masic I. Korijeni medicine i zdravstva u Bosni i Hercegovini. Avicena, Sarajevo, 2004: 228 pp.
- Hadzovic S, Masic I. Attari i njihov doprinos razvoju farmacije u Bosni i Hercegovini. Avicena. Sarajevo, 1999: 160 pp.
- Masic I. Zdravstvo u Bosni i Hercegovini tokom osmanskog perioda. Avicena. Sarajevo, 1995, 40 pp.
- Masic I. Historija zdravstvene i socijalne kulture u BiH. Avicena. Sarajevo, 1993, 48 pp.
- Buljan S. Povijesne crtice Kreseva i Franjevackog samostana: 1887-1997. Kiseljak, 1997.
- Hadzovic S. Farmacija i veliki doprinos arapske islamske znanosti njenom razvitku. Med Arh. 1997; 51(1-2): 47-50.
- Gusic S. Uredjenje attarske djelatnosti u osmanskome periodu u Bosni i Hercegovini. In: Hadzovic S, Masic I. isaradnici. Attari i njihov doprinos razvoju farmacije u BiH. Sarajevo: Avicena. 1999: 23-9.
- Devetak Z. Ljekaruse iz osmanskog perioda. In: Hadzovic S, Masic I. i sar. Attari i njihov doprinos razvoju farmacije u BiH. Avicena. Sarajevo, 1999: 67-73.
- Latal-Danon Lj. Jevrejska komponenta u attarskoj djelatnosti. In: Hadzovic S, Masic I. i sar. Attari i njihov doprinos razvoju farmacije u BiH. Avicena. Sarajevo, 1999: 35-8.
- Muminagic S, Masic I. The classics of Arabic medicine. Med Arh. 2010; 64(4): 254-6.
- Masic I. Zemaljska bolnica u Sarajevu. Avicena. Sarajevo, 1994, 1994, 138 pp.
- Masic I. et al. Srednjovjekovna arapska medicina. Avicena. Sarajevo, 2010, 276 pp..
- Masic I, Skrbo A, Mulic I, Zunic L. Farmacija u islamu. Avicena. Sarajevo, 2010. 120 pp.
- Masic I. Arapska medicina. Avicena. Sarajevo, 1994, 58 pp.
- Masic I, Dilic M, Solakovic E, Rustempasic N, Ridjanovic Z. Why historians of medicine called ibn al-nafis second Avicenna? Med Arh. 2007; 62(4): 244-9.
- Masic I. On occasion of 800th anniversary of birth of ibn al_nafis - discoverer of cardiac and pulmonary circulation. Med Arh. 2010; 64(5): 309-13.
- Masic I, Ridjanovic Z, Kujundzic E. Ibn Sina - Avicena - Zivot i djelo. Avicena. Sarajevo, 1995. 148 pp.
- Masic I. Klasici Arapsko-islamske medicine. Avicena. Sarajevo, 1995, 96 pp.
- Masic I. Thousand year anniversary of the historical book "Kitab al-Qanun fit-tibb" - the Canon of medicine, written by Abdulah ibn Sina. Journal of Research in Medical Sciences. 2012; 17(11): 993-1000.
- Masic I. i sar. Doprinos islamske tradicije razvitku medicinske znanosti. Avicena. Sarajevo, 1999, 212 pp.
- Marcinkovic J. Božija biljna ljekarna, Školska knjiga: Zagreb 2001.