

The use of minerals in medicine in Turkestan khanates (XVI-XIX centuries)

Abstract. in this article, in Bukhara, Khiva, and Kokand khanates (XVI-XIX centuries), mining products such as iron, saltpetre, oil, ruby, emerald, ruby, diamond were used in the treatment of various diseases and the useful properties of these minerals are given.

Key words: mining products, medicine, products of totio, magnetic stone, iron, saltpeter, oil, ruby, emerald, ruby, diamond, treatment.

The inhabitants of Turkestan khanates also used mining products effectively in medicine. According to Muhammad Talib, Tajiddin Hasanhoji (the author's father), a descendant of the sheikhs of Dzhoybor, built a "hospital" in Bukhara, and the population said that "if anyone needs medicine, juice, roses, oils or peat vodka, eye medicine, our father is in the corner of our village." he would have been ready, they would have taken from him" - he writes¹. It is known that one of the eye medicines widely used in the Middle Ages was "totio". Totiya, that is, a crystal-crystal, transparent substance formed from copper rust, is also known to the local population, and it is mainly used in medicine. In general, since ancient times, people of the East applied this medicine to the eyes in order to clarify the eyes².

This situation indicates that the Khojas of Dzhoybor used different types of rocks for medicine, and that they served to a certain extent in mining and used their benefits in the life of the community. Sources provide information about the use of mountain mummy in bone diseases³.

Oil products were used in the treatment of skin ulcers and childhood diseases in the Kokand Khanate. Some of these rocks are used as ointments for various wounds.

Salt is used to cure toothache, open wounds, heal them quickly, and bone pain.

The ruby stone was used in jewelry not only for its beauty, but also for its healing properties. Mahmud ibn Mansur (15th century) said that "the property of ruby is that if it is carried by a person, it protects against cholera and other diseases. If it is kept in the mouth, it will strengthen the heart, remove sadness, [a person] will not feel thirsty, he will always be happy and happy." ⁴. According to Aminaddin Khan bin Sayyid Abdul Makarim Amir Khan al-Husaini al-Hirawi (19th century), "ruby and diamond lighten the heart and have the power to drive away sadness from the heart." It is said that the ruby stone balances the blood pressure in the blood vessels and has the property of purifying the blood. ⁵. The population was also aware of the useful properties of stones. These features have an important role in determining the price of

¹ Muhammad Talib. Matlab ut-talibin / translated from Persian and comments by G. Karimi and E. Mirkomilov. - T.: Movarounnahr. 2016.- B.197.

² Khoja Samandar Termizy. Program ul-muluk. (Translation from Persian-Tajik by J. Esonov.) - Tashkent., "Sharq", - 2001. - P. 333.

³ Mahmud bin Wali. "Bahr ul asrar fi manaqib ul-ahyor" (The sea of secrets about the bravery of noble people). UzRFASHI manuscript No. 2372 -329 p. sheet

⁴ Muhammad bin Mansur. Javharnoma. UzR SHI No. 2294 /II numbered manuscript -186 b - 191 a. sheet

⁵ Aminuddin Khan bin Sayyid Abdul Makarim Amir Khan al-Husaini al-Hirawi. (About knowing the value of jewelry.) UzRFASHI #5050/ III. - 139 p. sheet

these jewels. According to this author, the value of the ruby and the diamond in the best state of the stone was equal.

Author unknown (copied by the calligrapher Kholmurod Gullanli in 1877) in the work "Javahirlar Risola", it is noted that every stone was used in jewelry by the people, knowing that it has medicinal properties.⁶ In particular, it is said about the diamond: "A person who keeps a diamond looks precious to kings (sultans) and ahkom (governors). Not afraid of anyone. Jazam and bars [barsom] and mahiulyo-like diseases are repelled by the stain.⁷ The author also gives interesting information about the ruby stone.⁸ "Hukamo (judges) say that anyone who keeps a deaf person with him will be safe from all sick people and will give strength to him. [The text in the margin: garduh deb – izhaklik amur – (intestinal amuz is prescribed, the result is studied.) Let the person who keeps the dumb look dear and honorable in the eyes of the people. If a child with a bad habit is tied to the navel (below the navel), get rid of bad behavior. And do not be afraid in sleep. If they add (red) redness, it will make the face of the person who eats interesting, become cheerful, and ward off swelling of the stomach.⁹ .

He also knew the properties of the local emerald stone. "Whoever keeps an emerald will be saved from eye pain and the light of his eyes will increase and he will not be blind (not seeing at night). Hukamo is said to be an emerald, the most poisonous of all poisons. If he knowingly gave poison to everyone, if he crushed and crushed a half-emerald and added it to ayron and drank it, he would ward off the poison. If they hold a beautiful and beautiful emerald to their horizontal eye, they will be horizontally blind. There is nothing worse than that. And if animals like snakes and scorpions bite a person, if they crush two carats of emerald and add it to a rose, and rub it on the ground, it will bring out the poison and calm the pain. Those who exaggerate, may the emerald-bearded zurg"(?) be safe from the evils of the environment. May the light of his eyes increase.¹⁰ .

Other authors of the Middle Ages also confirm such properties of emerald. Emerald is also protected against poison by Beruni, there are no snakes in the place where there is emerald, the color and shape of the emerald grows and shrinks according to the seasons of nature, the color of the emerald turns towards the end of the month, and the emerald depends on the direction of the wind. information such as deviation is found. There is information that it is found in the state of gel among stones in the mountains. Abu Rayhan Beruni informs about Khorezmshah's having an emerald goblet" is noteworthy. Ibn Mubarak Muhammad al-Qazvini (19th century) also confirms such information about emerald.¹¹ .

Special medical properties of Lojuvard stone were known to many. According to "Javahirlar Risola" "If everyone who has a lojuvard gets rid of intestinal pain and rubs it on the eye instead of rubbing it, it will get rid of eye disease and increase the light of the eye." - is noted. Lojuvard was among the trade products of the Bukhara Khanate.

Residents of Turkestan khanates (jashm) used to get nephrite stone through foreign trade. This stone was widely used in jewelry, making daggers, knives, sword hilts. According to the

⁶ "Book of Jewels". UzRFASHI inv. 1273/II. - 144 a- 152b. sheets.

⁷ "Book of Jewels". UzRFASHI inv. 1273/II. – sheet 145 p.

⁸ Turayeva S. R. " Javohirlar risolasi"- ma'danlar haqida muhim manba. // Sharqshunoslik. Toshkent. -2016. – B. 42.

⁹ "Book of Jewels". UzRFASHI inv. 1273/II. – sheet 146 p.

¹⁰ "Book of Jewels". UzRFASHI inv. 1273/II. – sheet 147 p.

¹¹ . Ibn Mubarak Muhammad al-Qazvini. Javharnoma. (Minerology) OZR FA SHI. Manuscript No. 3053, sheet 38 p.

local population, jade stone is useful for treating dizziness and dizziness. It was known that everyone who keeps a hyacinth next to him will get rid of piles, his complexion will be red, and the person who keeps the hyacinth will be saved from the disease of the skin.¹²

Muhammad ibn Mansur mentions that the marble stone is a cure for insomnia, and most people keep it with them because of this property, as well as its ability to uplift the spirit and bring joy.¹³ He especially notes that the Feruza stone makes the eyes clear, gives strength to the soul, and the person who wears jewelry made of this stone has a kind and forgiving attitude towards those around him.¹⁴ Ibn Mubarak Muhammad al-Qazwini said that the content of wine in a glass made of turquoise stone does not become nauseated quickly, that the wine has a strong effect on the person who drinks it in such a glass, that looking at this stone for a long time makes the eyes clear and increases the power of vision, shabkor (at night) He writes that it cures the disease, and that eating the crushed feruza is useful in "rish" disease.¹⁵

According to scientist S.Karimova, in medieval medicine, golden heart and bones were included in the powder form of drugs that were applied and drunk for "diseases of foxes and snakes".¹⁶

In medicine, magnetic stones were also used to remove an iron arrowhead stuck in a wound on a person's body, a needle tip stuck in a blood vessel, or a piece or piece of various metals stuck in the stomach. About this, Muhammad ibn Mansur informs that there are several types of "magnetis" - magnetic stone, mixed with gold, with arziz (colored alloy), with silver, and mixed with iron. "Magnet" - a magnetic stone has the property of attracting whatever metal it is mixed with. Iron and copper are minerals that can be combined. Most silver magnetic stone is white in color and it is also called "hajrul qabur" - gravestone. People also put it in graves. If the teeth are washed with silver magnetic stone powder, it has teeth whitening properties.¹⁷

In medicine, blacksmiths also made medical instruments in Turkestan khanates.¹⁸ In the Ichan castle museum-reserve, there are 19th-century iron dental tools - pincers, muchanak (muchina) - iron pincers for plucking hair, barbers' working tools are made of steel, and the handle is made of wood. 'lgan poki - items made by craftsmen, such as razors, are stored¹⁹. In 1860, Gulibefa-de-Blocville, a British officer captured by the Turkomans, was bleeding from his eyes. wrote that they had learned to make such instruments from the Jews.²⁰

The people of Turkestan knew how to clean the water by putting bitter stones and silver minerals in it for drinking or using it as an antiseptic. Putting a piece of silver in the baptism of newborn babies or wearing a silver coin or a piece of silver to young children means that this metal is aware of its healing properties.

Conclusion

¹² "Book of Jewels" UzRFASHI inv. No. 1273/II 152b. sheet

¹³ Muhammad bin Mansur. Javharnoma. UzR SHI No. 2294 / II numbered manuscript - 203 p sheet.

¹⁴ Muhammad bin Mansur. Javharnoma. UzR SHI No. 2294 / II numbered manuscript - 204 b sheet.

¹⁵ Ibn Mubarak Muhammad al-Qazwini. Javharnoma. (Minerology) OZR FA SHI. Manuscript No. 3053, sheet 63 p

¹⁶ Karimova S.U. The role of Central Asian scientists in the development of chemistry and pharmacology of the IX-XII centuries. T. 2002. -. 126 p.

¹⁷ Muhammad bin Mansur. Javharnoma. UzR SHI No. 2294 / II numbered manuscript -215 b-217a pages.

¹⁸ Turayeva S. R. XVIII asr ikkinchi yarmi – XX asrning 70- yillarida Xiva xonligi hunarmandchilik terixi. "Yangi Nashr", – Toshkent. 2018. – B. 96.

¹⁹ Ichan Castle Museum Reserve Fund. GXMZ KP 6227 / 46 inv. 131.

²⁰ Gulibefa de Blocquil. Fourteen-month captivity among the Turkmens // Turkestan collection. – St. Petersburg, 1869. T. 16. – P. 37.

In conclusion, it is interesting to say that the trade of mining products between Turkestan khanates and other foreign countries was carried out intensively. Most of the goods produced by local artisans are exchanged for the raw materials of mining products of the state. Because in many khanates of Turkestan, it is forbidden to take out gold, silver, and copper in the form of money. Merchants brought metal from the country to foreign trade only in the form of craft products, and exchanged it for necessary minerals. This mining raw material, whose value is determined, was handed over to the state treasury and received as money.

References

1. Rustambayevna, T. S. Analysis of the Found New Dokuments on the "Charter of the Bukhara Gold Mining Company". International Journal on Integrated Education, 4(4), 245-255.
2. Rustambayevna, T. S. (2021). THE HISTORY OF THE GOLD INDUSTRY IN CENTRAL ASIA (XVI-XIX centuries.). Conferencious Online, 83-86.
3. Rustambayevna, T. S. (2021). About the Activity of " Fergana Rare Metal Mining Society". International Journal of Multicultural and Multireligious Understanding, 8(3), 254-259.
4. Rustambayevna, T. S. (2020). Some documents related to the history of mining in central asia (XVI-XX centuries). Asian Journal of Multidimensional Research (AJMR), 9(2), 72-78.
5. Aminuddin Khan bin Sayyid Abdul Makarim Amir Khan al-Husaini al-Hirawi. (About knowing the value of jewelry.) UzRFASHI #5050/ III. - 139 p. sheet
6. "Book of Jewels". UzRFASHI inv. 1273/II. - 144 a- 152b. sheets.
7. Ibn Mubarak Muhammad al-Qazvini. Javharnoma. (Minerology) OZR FA SHI. Manuscript No. 3053, sheet 38 p.
8. Ibn Mubarak Muhammad al-Qazvini. Javharnoma. (Minerology) OZR FA SHI. Manuscript No. 3053, sheet 63 p
9. Karimova S.U. The role of Central Asian scientists in the development of chemistry and pharmacology of the IX-XII centuries. T. 2002. - 126 p.
10. Turayeva S. R. XVIII asr ikkinchi yarmi – XX asrning 70- yillarida Xiva xonligi hunarmandchilik terixi. "Yangi Nashr", – Toshkent. 2018. – B. 96.
11. Turayeva S. R. " Javohirlar risolasi"- ma'danlar haqida muhim manba. // Sharqshunoslik. Toshkent. -2016. – B. 42.
12. Ichan Castle Museum Reserve Fund. GXMZ KP 6227 / 46 inv. 131.
13. Gulibefa de Blocquil. Fourteen-month captivity among the Turkmen // Turkestan collection. – St. Petersburg, 1869. T. 16. – P. 37.
14. Muhammad Talib. Matlab ut-talibin / translated from Persian and comments by G. Karimi and E. Mirkomilov. - T.: Movarounnahr. 2016.-197 p
15. Khoja Samandar Termizy. Program ul-muluk. (Translation from Persian-Tajik by J. Esonov.) - Tashkent., "Sharq", - 2001. - P. 333.
16. Mahmoud bin Wali. "Bahr ul asrar fi manoqib ul-ahyor" (The sea of secrets about the bravery of noble people). UzRFASHI manuscript No. 2372 -329 p. sheet
17. Muhammad bin Mansur. Javharnoma. UzR SHI No. 2294 /II numbered manuscript - 186 b - 191 a. sheet