

ORIGINAL ARTICLE

Jamasp, an Ancient Persian Pharmacist

Abstract

Although Iran has a deep history about 10000 years, its role in development of science in general and medicine in particular is yet to be known. There are several factors responsible for this, namely the destruction of a good number of ancient Persian manuscripts and books. Furthermore, lack of interest found among contemporary researchers seems to add to this anonymity. One way to compensate for this is to introduce scientific figures of the time. In this regard, Jamasp, as the great Persian scientist who lived about 500 BC, is introduced in this article. He was the minister of king Vishtasb and contemporary with Zoroaster. Though Jamasp is known as a great astronomer, physician, pharmacist, chemist and botanist by historians, he is a good candidate for the title “the father of Persian pharmacy”.

Key words: History of Pharmacy, Persia, Jamasp

Received: 7 Oct 2011; Accepted: 23 Jan 2012; Online published: 28 Jan 2012

Research on History of Medicine/ 2012 Feb; 1(1): 3-6

Introduction

Medical knowledge is like a chain: each ring depending on the previous one and making up the departure point for the other. And finding the other, not yet discovered rings of the chain demands a closer look into the history of medicine.

Though rewarding, working on ancient works is not usually as easy as it

Arman Zargaran^{1,2}
Abdolali Mohagheghzadeh^{1,2}

1- Research Office for the History of Persian Medicine, Shiraz University of Medical Sciences, Shiraz, Iran

2- Department of Traditional Pharmacy, Faculty of Pharmacy and Pharmaceutical Research Center, Shiraz University of Medical Sciences, Shiraz, Iran

Correspondence:

Abdolali Mohagheghzadeh
Department of Traditional Pharmacy,
Faculty of Pharmacy, Karafarin Street,
Shiraz, Iran.
mohaghegh@sums.ac.ir



may appear in the beginning, for most of them are hidden behind blurred descriptions. While the history of Persia, in general, goes back to about 10,000 years ago, we still have a little knowledge about the history of science in Persia, especially that of medicine (pre historic to 637 AD).¹ One reason for this is the destruction of most original ancient Persian manuscripts. Furthermore, not much research has been devoted to uprooting this part of the history. Then, unlike Greeks and Romans who are widely known to develop medicine, the role of Persians in contributing to or generating medical knowledge remains to be known. For instance, a large number of medical figures, standing as medical symbols, such as Hippocrates (as father of medicine),² Galen (as father of pharmacy),³ Asclepius snake (as symbol of medicine)⁴ and Rx (the symbol in beginning of prescriptions)⁵ are drawn from Greek history and myths. Then, it seems necessary to make an attempt to introduce those who have had a role in pushing science forward.

One of the most forgotten figures, belonging to ancient Persia, is Jamasp, an expert in medical sciences. His life story has always been mixed with myth. In this article, we have tried to draw a line between his mythical and historical character, thereby, getting closer to his true character. Then, to achieve this objective, we, in addition to investigating more recent works, have scrutinized the following ancient and middle Persian manuscripts: *Gathas* (in old *Avesta*, holy book of Zoroastrians),⁶ *Vēndidad* (a newer part of *Avesta*),⁷ *Yādegar-e-Zariran* (Memorial of *Zarēr*, a Pahlavic manuscript related to Sassanid period, 224-637 AD),⁸ *Shahnameh* (the book of kings, 10th century AD),⁹ *Bal'ami* and *Ibn Nadim* manuscripts (10th century AD),^{10,11} *Lob-ol-tavarikh* (historical manuscript which written by *Abdol Latif Ghazvini*, 16th century AD).¹²

Jamasp, His Life and Activities

The name Jamasp (*Jāmāspa*) means “owner of powerful horse” or “he who bridles horses”.^{13,14} In the *Gathas* of *Avesta*, Jamasp and his brother, *Frašaoštra*, belonging to *Hvōgva* family, were officials at the court of *Vishtasp* (*Vīštāspa*, the king of Kiani dynasty in mythic history of Iran)¹⁵ He was contemporary with Zoroaster, the prophet of Zoroastrians about 500BC or older, some other documents claim that he was simultaneous with beginning of Achaemenid period).¹⁶ He was one the first who accepted and believed in Zoroastrian religion.¹⁷ He was also known to get married with Zoroaster daughter, named *Pourucista*.¹⁸ Jamasp was the minister of *Vishtasp*¹⁹, and according to *Ghazvini*, Jamasp was the brother of king *Vishtasp*.²⁰

Vishtasp had a son, *Esfāndiār*. He was a brave Persian commander who was imprisoned upon the king's command. When *Turans* (Hyons, western neighbours of old Iran) attacked Persia, *Vishtasp* sent Jamasp to his son to encourage him to fight against *Turans*. *Vishtasp* also promised that if *Esfāndiār* won in the battle and defeated *Turans*, he would offer him the crown.²¹ Jamasp accompanied the king in the important war of Iran and *Turan* in which Persians defeated their enemies.²² He was known to have an important role in the story of prince *Esfāndiār* who was killed in the fight against *Rostam* (a mythical figure in Persian literature) in *Shahnameh* (the book of kings).²³ Furthermore, being an astronomer²⁴ Jamasp predicted the killing of *Zarir*, the brother of *Vishtasp* in the battlefield by *Turans*.²⁵ Finally, Jamasp died and was buried in *Khafir* of

- 1- Mohagheghzadeh et al, 2011: 18-23.
- 2- Cheng, 2001: 219-33.
- 3- Raubenheimer, 1929: 268-71.
- 4- Jones, 2008: 115-6.
- 5- Hajar, 2008.
- 6- Pourdavoud, 2003.
- 7- Darmesteter, 1898.
- 8- *Yādegar-e-Zariran*, 2008.
- 9- Ferdowsi, 2008.
- 10- Bal'ami, 2006.
- 11- Rafiei, 2005.
- 12- Ghazvini, 2007.
- 13- Tadjbakhsh, 2006: 103.
- 14- Malandra, 2008.
- 15- Mehr, 2003: 57.
- 16- Tadjbakhsh, 2006: 250.
- 17- Pourdavoud, 2003: 249.
- 18- Ibid
- 19- *Yādegar-e-Zariran*, 2008: 54.
- 20- Ghazvini, 2007: 55.
- 21- Ibid
- 22- *Yādegar-e-Zariran*, 2008: 57-60.
- 23- Ferdowsi, 2008: 360.
- 24- Ghazvini, 2007: 56.
- 25- Ferdowsi, 2008: 360.

Jahrom, now located in Fars province of Iran (figure 1).^{26,27}



Figure 1. The tomb of Jamasp which is placed in Khafr from the city of Jahrom in Fars province of Iran

Scientific Character of Jamasp

Ghazvini stated that Jamasp was coeval with Socrates (469–399 BC), the greatest scientists of the time.²⁸ Jamasp was a great chemist, as well. *Ibn Nadim* (10th century AD) mentioned his name along with 49 scientists known to be experts in chemistry (*Kimia*) and identified him as *Exir* producers (*Exir* was known as an ancient immortal medicine).²⁹ *Bal'ami*, the famous historian and the prime minister of Samanid dynasty (10th century AD), called him *Jamasp al hakim* (Jamasp, the great scientist) and considered him an expert in medicine, geometry and philosophy.³⁰ In the book of *Yadegar-e- Zariran*, he was introduced as a specialist in botany:

*“He knows everything about plant, the growth, flourishing in day, at night or tomorrow.”*³¹

And according to *Zardust-namah* (a manuscript written in Pahlavi after the 9th century):

“He [Zoroaster] gave to Jamasp a bit of the consecrated perfume, and all sciences became understandable to him. He knew about all things to happen and that would happen until the day of resurrection”.³²

Jamasp Namag (Story of Jamasp) is a book regarding to Jamasp, in which there are important questions and answers about creation between Jamasp and Vishtasb.³³

Conclusion

Jamasp was a great scientist in ancient time and his fame was well appreciated by the 10 century historians, such as *Bal'mi* and *Ibn Nadim*. He is an indispensable part of history of medical sciences in Iran and the world. According to Avesta, the holy book of Zoroastrians, physicians were divided into three main groups; *“one who heals with the knife (kareto baēšaza), one who heals with herbs (urvarō baēšaza), and one who heals with the Holy Word (mānsrspand baēšaza)”*.³⁴ Being a great botanist, chemist and pharmacist, Jamasp more likely belongs to the second group and is a good candidate for the title “father of pharmacy in Persia”. His contribution to different fields of science, politics, and religion reflects his

- 26- Rafiei, 2005: 60.
- 27- Ghazvini, 2007: 56.
- 28- Ibid
- 29- Rafiei, 2005: 60.
- 30- Bal'ami, 2006: 470.
- 31- Yadegar-e-Zariran, 2008: 54.
- 32- Dobroruka, 2002.
- 33- Rafiei, 2005: 60.
- 34- Darmesteter, 1898.



great character in the history of Persia, and also implicitly the importance of science in Ancient Persia.

References

- Anonymous. [*Yádegar-e-Zariran*]. Translated into Persian by Navabi M. Tehran: Asatir. 2008. [in Persian]
- Bal'ami. *Bal'ami history*. Corrected by Bahar MT. Tehran: Zavar. 2006. [in Persian]
- Cheng TO. Hippocrates, cardiology, Confucius and the Yellow Emperor. *Int J Cardiol* 2001; 81: 219–33.
- Darmesteter J. *Sacred books of the east*. American Edition, New York: The Christian Literature Company. 1898, Digital edition, available at: <http://www.avesta.org/vendidad/vd7sbe.htm>; accessed on 2/5/2011.
- Dobroruka V. *Stories about chemical induction of vision in 4Ezra in the light of comparative Persian material*. Master of Studies thesis. University of Oxford. 2002.
- Ferdowsi A. [*Shahnameh*]. Tehran: Elham. 2008. [in Persian]
- Ghazvini AL. [*Lob-ol-tavarikh*]. Tehran: Anjoman Asar va Mafakher Farhangi. 2007. [in Persian]
- Hajar R. Healing eye. *Hearth views*. 2008; 9(1): Available at: http://www.hmc.org.qa/heartviews/vol9No1/ART_MEDICINE.htm
- Jones KB. The staff of Asclepius: a new perspective on the symbol of medicine. *WMJ* 2008; 107(3): 115-6.
- Malandra WW. JĀMĀSPA. *Encyclopedia Iranica*. Available at: <http://iranica.com/articles/jamaspa>; originally published in December 15, 2008.
- Mehr F. *The Zoroastrian tradition*. California: Mazda Publishers. 2003.
- Mohagheghzadeh A, Zargaran A, Daneshamuz S. Cosmetic sciences from ancient Persia. *Pharm Hist (Lond)* 2011; 41(2):18-23.
- Pourdavoud E. *Avesta*. Tehran: Doniaie Ketab. 2003. [in Persian]
- Rafiei HR. *Fars, the half of paradise*. Shiraz: Takht Jamshid. 2005. [in Persian]
- Raubenheimer O. History of pharmacy a valuable asset to the pharmacist. *J Am Pharm Assoc* 1929; 18(3): 268–71.
- Tadzbakhsh H. *History of veterinary medicine and medicine of Iran. Vol. 1*. Tehran: Tehran University Publications. 2006. [in Persian]