

## SHORT COMMUNICATION

### A Short Introduction to a 19<sup>th</sup> Century Persian Book on Pulsology: *Naiier Azam*

#### Abstract

Islamic Golden Age, 9-12 century AD, was the period through which Persian scientists and physicians were most influential in improving medical sciences including cardiovascular knowledge. Although post-Islamic Golden Age witnessed a number of great Persian scholars moving cardiovascular concepts forward, they failed to become as well known as their predecessors. One of these scholars was Hakim Mohammad Azam Khan belonging to the 19<sup>th</sup> century. He authored many books on medical sciences. He wrote all the books in Persian. Some of his most famous works are *Eksir Azam* (The Greatest Elixir; a comprehensive medical encyclopedia); *Romouz Azam* (The Greatest Secrets; a general book on medicine) and *Qarabadin Azam* (Pharmacopeia). In addition, he had a valuable treatise on pulsology, named *Naiier Azam*. *Naiier Azam*, one of the important works on cardiology in Persian medicine, which includes three parts: one introduction and two teaching chapters (*Taelim*).

**Key words:** History of medicine, Cardiology, Persian medicine

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### Introduction

Persian scientists and physicians contributed to improving the medical sciences, including cardiovascular knowledge, from the 9<sup>th</sup> to the 12<sup>th</sup> century AD.<sup>1</sup> Akhawayni (?–983 AD)<sup>2</sup>, Rhazes (865–925 AD)<sup>3</sup>, Haly Abbas (949-982 AD)<sup>4</sup>, Avicenna (980-1035)<sup>5,6</sup> and Jorjani (1042-1137 AD)<sup>7</sup> are some of the most prominent and influential Persian physicians on cardiology. They were very influential in making progress in the field of cardiology. Their main books, such as *Canon of Medicine* (written by Avicenna) and *Liber Continent* (written by Rhazes), were taught and used in Eastern and Western universities for centuries.<sup>8,9</sup> This period is called Islamic Golden Age.<sup>10</sup> The paradigm of medicine in this period was humoral medicine and continued to the 17<sup>th</sup> century in the West and 19<sup>th</sup> century in the East when it was replaced with molecular and current paradigm of medicine.<sup>11</sup>

Although there have been some great Persian scholars who improved cardiovascular concepts after the Islamic Golden Age, they are not as well known as their predecessors. Hakim Mohammad Azam Khan, in the 19<sup>th</sup> century, is one of them. His ancestor, Hakim Mohammad Kazem Khan was from Khorasan (eastern Iran) and immigrated to Herat (Afghanistan). After him, his posterity went to the Rampur, a city in India. Hakim Mohammad Azam Khan was born in this city in 1814 and died in 1902.<sup>12</sup>

He authored many books on medical sciences. He wrote all the books in Persian. Some of his most famous works are *Eksir Azam* (The Greatest Elixir; a comprehensive medical encyclopedia); *Romouz Azam* (The Greatest Secrets; a general book on medicine) and *Qarabadin Azam* (Pharmacopeia). Also, he had a valuable treatise on pulsology, named *Naiier Azam*. Introducing this book, he wrote: "I wanted to write a treatise including the benefits which were left unsaid in the most other book. In order making the book useful for others, I also, discussed in detail about the pulse rate and its causes, , and prescribed some unfamiliar compound medicines, recommended by nobody."<sup>13</sup>

### *Naiier Azam*, the last influential books on cardiology in Persian Medicine

*Naiier Azam* includes three parts: one introduction and two instructive chapters (*Taelim*). In the introduction, the author praises and worships the God for creating the heart, vessels and the whole cardiovascular system. Then, he describes and spells out the identification and differentiation of pulse and related principals in the first chapter. The author also profoundly explains why a physician should consider the pulse as a main diagnosis approach. In the following, the author thoroughly discusses the details of pulse parameters and individualizes their quality with regard to each disease and condition. Moreover, pulse patterns in all usual and daily occasions have also been defined. Azam Khan was well acquainted with pulsology and thus cited the findings and experiences of preceding physicians in the book, with modifications. Therefore, *Naiier Azam*, in addition to the experiments of the author, can also be considered as a review of Persian scholars' standpoints on pulse and pulsology.<sup>14</sup>

Compared with older books, this book has some advantages. *Naiier Azam* includes a lot of practical information. The author tried to write briefly, omitting the unnecessary parts for a physician. It is a well- organized

- 1- Khalili *et al.*, 2010: 4-7.
- 2- Yarmohammadi *et al.*, 2013: 1819-21.
- 3- Zarrintan *et al.*, 2013: 604-5.
- 4- Dalfardi *et al.*, 2013.
- 5- Zargarani *et al.*, 2013: 233-7.
- 6- Karimi *et al.*, 2013: 3041.
- 7- Zarshenas *et al.*, 2012b: 2764-5.
- 8- Zarshenas *et al.*, 2012a: 1001-2.
- 9- Zargarani *et al.*, 2012: 389-90.
- 10- Khalili *et al.*, 2010: 4-7.
- 11- Zargarani *et al.*, 2012: 389-90.
- 12- Azam Khan. 1854/2010.
- 13- Ibid.
- 14- Ibid.



book, offering novel ways in presenting data. He categorized the book based on the types of pulses. Also, he presented valuable information about some unfamiliar compound medicines (pharmaceutical formulations with two or more ingredients) for pulse related disorders.

### Conclusion

Hakim Mohammad Azam Khan was known as the last genius physicians working in the field of humoral medicine. His books are considered as the most important and citable traditional Persian medicine sources. But none of those are translated into Latin or English and hence, up to now, are not well known in the West. Undoubtedly, the book of *Naiier Azam* is the last important work of cardiology in Persian medicine during the Islamic Golden Age.

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