



# Şânîzâde Mehmed Atâullah Efendi (1771?–1826), who is the author of the first modern anatomy book *Mir'âtü'l-Ebdân fî Teşrihi Âzâü'l-İnsân* in the Ottoman Empire

Ayşe Bahşi<sup>1</sup> · İlhan Bahşi<sup>2</sup>

Received: 1 March 2019 / Accepted: 7 March 2019 / Published online: 12 March 2019  
© Springer-Verlag GmbH Germany, part of Springer Nature 2019

## His life

Şânîzâde Mehmed Atâullah Efendi (Fig. 1) was born in Ortaköy, Istanbul, in the 1770s (probably 1771) [1]. He died on August 5, 1826 [2]. Although he died about two centuries ago, the knowledge about him is very limited [1]. After he graduated from the madrasah in 1786, he studied at the Süleymaniye Medical Madrasa and Halıcıoğlu Engineering School [3]. However, it is not known before which education was gotten [1]. While he was studying at Süleymaniye Medical Madrasa, he got medical education from Hekimbaşı Numan Efendi and then from European physicians. He knew Arabic, Persian, Greek, Italian, and French languages well [1, 2]. He was also interested in calligraphy, painting, music, watchmaking, and hunting. He had worked in various positions in state affairs. Despite his graduation from the Süleymaniye Medical Madrasa and his many significant medical books, there is no record of practicing medicine in the palace or any hospital [1].

## His books

His outstanding qualities and deep knowledge of medicine and modern medical books had a great impact on the period he lived. There are 14 or 16 books of which 5 are known for medicine, 4 for military service, and 2 for mathematics, others

for history, literature, and geography [1, 3]. The medical books which are named as *Hamse-i Şânîzâde* (Five work of Şânîzâde) or *Kânûn-ı Şânîzâde* (since the famous physician Avicenna's Kânûn book is contained of five volumes, these books were named as Kânûn) consist of five books. Their names are as follows: *Mir'âtü'l-Ebdân fî Teşrihi Âzâü'l-*



Fig. 1 Şânîzâde Mehmed Atâullah Efendi (1771?–1826)

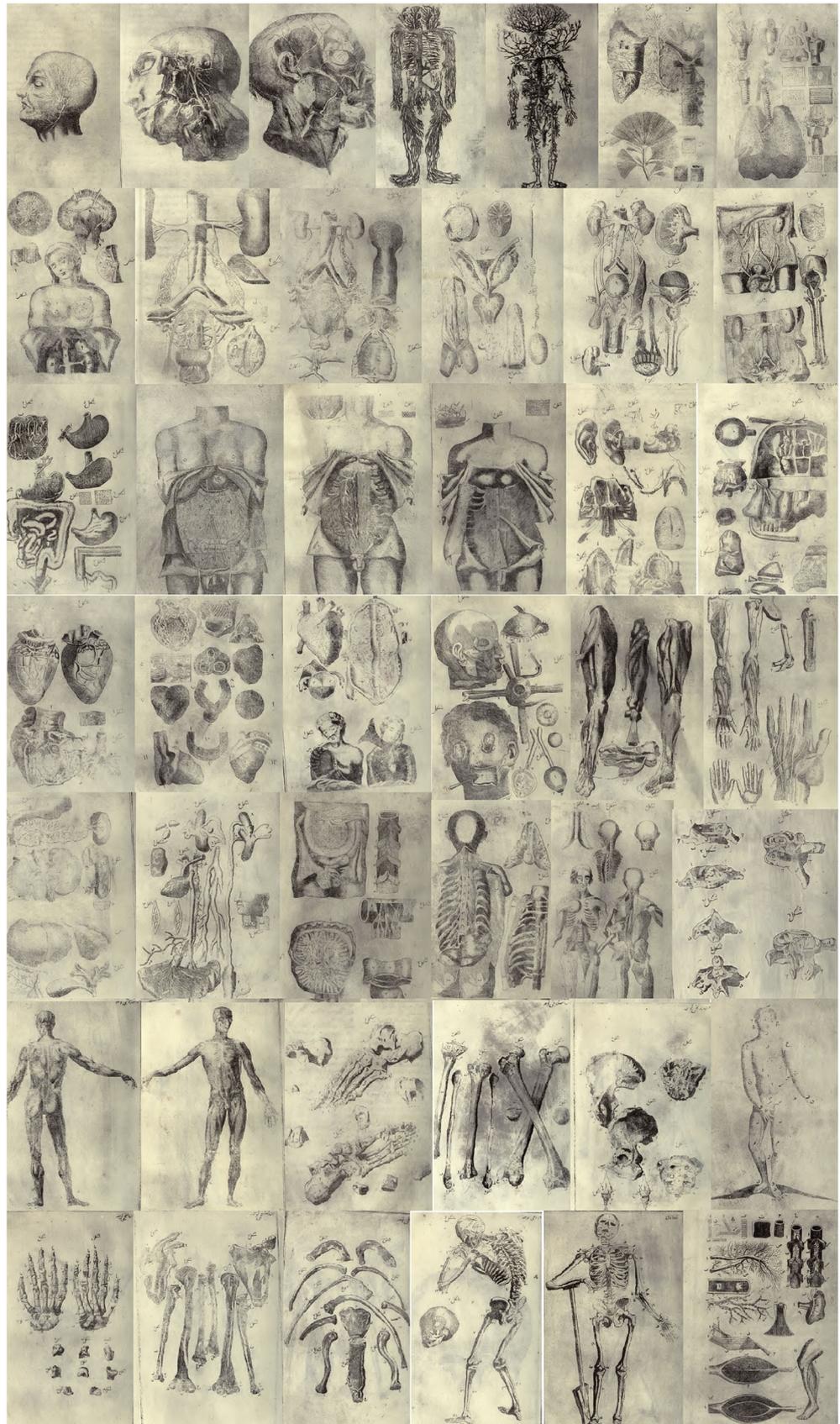
✉ İlhan Bahşi  
dr.ilhanbahsi@gmail.com

Ayşe Bahşi  
dr.aysebahsi@gmail.com

<sup>1</sup> Clinic of Physical Medicine and Rehabilitation, Gaziantep Dr. Ersin Arslan Education and Research Hospital, Gaziantep, Turkey

<sup>2</sup> Department of Anatomy, Faculty of Medicine, Gaziantep University, 27310 Gaziantep, Turkey

**Fig. 2** Some drawings in the book named *Mir'âtü'l-Ebdân fi Teşrihi Âzâü'l-İnsân*



*İnsân (Anatomy), Usûlü't-Tabî'a (Physiology), Miyârü'l-Etibbâ (Internal diseases), Kanûnü'l-Cerrâhîn (Surgery), and Mîzânü'l-Edviye (Pharmacology).*

Although the books which were written in fourteenth and seventeenth century *Teşrihü'l-Ebdan Min e't-Tıb* [4] and *Teşrih-ül Ebdan ve Tercümânı Kibale-i Feylesûfan* [5] are major anatomy books in the Ottoman Empire, *Mir'âtü'l-Ebdân fî Teşrihi Âzâü'l-İnsân (Mirror of the Bodies in the Dissection of the Sections of the Human Body)* is considered as the first modern anatomy book in the Ottoman Empire [1, 3]. This book contains 56 anatomical plates (Fig. 2). Although Şânîzâde stated that he

benefited from the pictures of previous physicians such as Bernhard Siegfried Albinus (1697–1770), Raymond Viessens (1635–1715), Clopton Havers (1657–1702), Albrecht von Haller (1708–1777), Guichard Joseph Duverney (1648–1730), and Bartolomeo Eustachi (1513?–1574), there is no information about other drawings [1, 2]. Within the book, many structures such as the meninges, tentorium cerebelli, middle meningeal artery, dural venous sinuses, corpus callosum, brain ventricles, choroid plexus, pineal gland, infundibulum, cerebellum, mammillary body, and brain stem have been shown and explained in the part of dissection of the brain and brain sections (Fig. 3 and cover).



**Fig. 3 and cover** The drawings of cranial bones and the nervous system in the book named *Mir'âtü'l-Ebdân fî Teşrihi Âzâü'l-İnsân*

Acıduman et al. [2] stated that the information in the book does not only include only translation from foreign medical books, but also Şânizâde performed dissection and made comparisons to the knowledge of other scientists. His books were taught as textbooks in medical schools of the Ottoman Empire for a long time [1].

## Conclusion

Şânizâde Mehmed Atâullah Efendi, who had outstanding achievements in the field of medicine, especially in anatomy during the Ottoman Empire and who conveyed not only his knowledge but also the knowledge from European physicians to other physicians at that time, should be appreciated.

## Compliance with ethical standards

**Conflict of interest** None.

## References

1. Kazancıgil A, Zülfikar B (1991) XIX. Yüzyılda Osmanlı İmparatorluğunda Anatomi. Özel Yayınlar, İstanbul
2. Acıduman A, Er U, Şimşek S (2009) Şânizâde Atâullah Mehmed Efendi ve Mirâtü'l-Ebdân fi Teşrih-i A'zâi'l-İnsân Adlı Eserindeki Santral Sinir Sistemi Anatomisi ile İlgili Bölümler. *Türkiye Klinikleri J Med Ethics* 17(2):71–86
3. Bayat AH (2010) Tıp tarihi. Merkezefendi Geleneksel Tıp Derneği, İstanbul
4. Bahşi İ, Orhan M, Çetkin M (2018) The anatomy of spinal nerves in the “Teşrihü'l-Ebdan Min e't-Tıb” written in the fourteenth century. *Lokman Hekim Journal* 8(2):133–137. <https://doi.org/10.31020/mutfd.419223>
5. Bahşi İ, Orhan M, Çetkin M, Turhan B, Sayın S (2017) Anatomy of cranial nerves in the first Turkish illustrated anatomy manuscript. *Childs Nerv Syst* 33(11):1855–1862. <https://doi.org/10.1007/s00381-016-3212-1>

**Publisher's note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.