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A Reformist in Ottoman Medicine: Salih bin Nasrullah and Tıbb-ı Cedid

Osmanlı Tıbbında Bir Reformist: Salih bin Nasrullah ve Tıbb-ı Cedid

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Öz: Bu çalışmanın amacı, 17. yüzyılın ikinci yarısında Osmanlı tıbbında geleneksel Doğu tıp ekolünden bir kopuşu temsil eden ve "Tıbb-ı Cedid" olarak bilinen yeni dönemin öncülerinden olan Halep doğumlu Osmanlı hekimi Salih bin Nasrullah'ın hayatını, kişiliğini ve tıp alanına katkılarını incelemektir. Çalışma, Nasrullah'ın öncülüğünde Osmanlı tıp dünyasına giren Paracelsus'un etkilerini tanıtmayı ve Nasrullah hakkında ortaya atılan bazı iddiaları incelemeyi amaçlamaktadır. Nasrullah'ın Paracelsus'un eserini görmüş ve dil becerileri sayesinde bu eseri çevirmiş olduğu iddialarının kanıtlanmasının güç olduğunu öne sürmektedir. Ayrıca, Nasrullah'ın kişiliğine dair sunulan bazı bilgilerin hatalı olabileceği ifade edilmektedir. Osmanlı arşiv belgeleri ve tabakat kitaplarına dayanan bu çalışma, Nasrullah'a Tekirdağ arpalığının verildiği tarihin yanlış kaydedildiğini ve kendisinin ihtida ettiğine dair kesin bilgi bulunmadığını, dil açısından ise özellikle Latince gibi dillere ne kadar hakim olduğunun tespit edilemediğini ortaya koymaktadır. Bu çerçevede çalışma, Nasrullah hakkında literatürde yer alan yaygın bilgileri düzelterek hekimin tutarlı bir biyografisini oluşturmayı amaçlamaktadır. Çalışma, giriş dışında iki bölüm halinde planlanmıştır: İlk bölümde Nasrullah'ın biyografisine dair tespitler ele alınırken, ikinci bölümde Nasrullah'ı önemli kılan Tıbb-ı Cedid ile ilişkisi üzerine bir tartışma yürütülmüştür.

Anahtar Kelimeler: Salih bin Nasrullah, Ibn Sellum, Tıbb-ı Cedid, Paracelsus, Osmanlı Tıbbı.

Abstract: The aim of this study is to analyse the life, personality and contributions of the Aleppo-born Ottoman physician Salih bin Nasrullah, one of the pioneers of the new period known as 'Tıbb-ı Cedid', which represented a shift from the traditional Eastern school of medicine in Ottoman medicine in the second half of the 17th century. The study also aims to introduce the influence of Paracelsus, who entered the Ottoman medical world under Nasrullah's leadership, and to examine some of the claims made about Nasrullah. It argues that the claims that Nasrullah had seen the work of Paracelsus and translated it thanks to his language skills are difficult to prove. It is also argued that some of the information presented about Nasrullah's personality may be erroneous. This study, based on Ottoman archival documents and tabakat books, reveals that the date of Nasrullah's granting of the Tekirdag benefice was recorded incorrectly, that there is no definite information about his conversion, and that it is not possible to determine how well he mastered languages, especially Latin, in terms of language. In this framework, the study aims to correct the widespread information about Nasrullah in the literature and to create a coherent biography of the physician. Apart from the introduction, the study is planned in two parts: The first part

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deals with the determinations regarding Nasrullah's biography, while the second part includes a discussion on his relationship with Tıbb-ı Cedid, which makes Nasrullah important.

Keywords: Salih bin Nasrullah, Ibn Sellum, Tıbb-ı Cedid, Paracelsus, Ottoman Medicine.

Introoduction

The 16th century was a period of significant change. During this time, the structures of civilizations and empires began to transform (Fernand, 1996). The discovery of the oceans and the New World, the establishment of colonial empires, the Protestant Reformation, and the humanist-based Renaissance revolution contributed to scientific developments. These advances also impacted the field of medicine and the intellectual lives and perspectives of those working in medicine-related fields, such as pharmacy, chemistry, and medicine, which were yet to emerge as individual professional domains. During this period, some of the most prominent intellectuals in European medicine emerged, including Theophrastus Bombastus von Hohenheim (1493-1541), also known as Paracelsus. The leading proponent of Europe's iatrochemistry movement, he strongly influenced the Western world and the East, particularly the Ottoman medical world.

Paracelsus had a powerful bearing on Salih bin Nasrullah, the prominent Ottoman medical practitioner. Nasrullah blended his knowledge of classical oriental medicine with the works of Paracelsus, which initiated new trends and understanding of the medical field, coalescing as the *Tıbb-ı Cedid* school. This study evaluates Salih bin Nasrullah's biography and the existing scholarship about his understanding of medicine and his role in developing the *Tıbb-ı Cedid* school based on his works and new information (Adıvar, 1991; Aydüz, 2016; Bayat, 1999; Erdemir, 1996; Kavalalı, 1993; Kırbıyık, 2009; Kolta, 1981; Shefer, 2011). In this context, issues such as Nasrullah's conversion to Islam and his knowledge of Latin are discussed in light of available information. Furthermore, this study establishes the period of Nasrullah's services as Ottoman Palace's chief physician by using qualitative research method (Ottoman archive documents, new documents in the light of new information from takabat works). Thus, the study aims to correct the generally accepted assumptions about Nasrullah in the existing literature and to present a more coherent biography of the physician and his work.

Salih Bin Nasrullah or Ibn Sellum

Salih bin Nasrullah, also known as Ibn Sellum and Çelebi Salih, was a 17th-century Ottoman medical scholar who rose to the rank of *başhekim* (Chief Physician) during the reign of Sultan Mehmed IV (1648-1687). Born as Salih bin Nasrullah al-Halebi, his exact date of birth is unknown (Mehmed Süreyya, 1996, p. 1462, Ahmed İsa, 1942, pp. 222-223, Bayat, 1999, p. 603). However, he certainly died on 31 August 1669 (Uşşâkîzâde İbrâhîm Hasîb Efendi, 1997: 672, Şeyhi Mehmet Efendi, 2018: 672, Mehmed Râşid, 1865: 164). Although little information exists about the early years of his life, it is known that he was born in Aleppo and spent his youth there (Bursalı Mehmed Tâhir, 1333-34: 224, Şehade, 2005:187). After studying the *shari'a* (religious) sciences, Salih bin Nasrullah studied medicine at the Aleppo *Darüş-Şifa* (hospital), the city's main hospital, where he worked for some time (el-Muhibbî, 2010: 240, Brockelmann, 1938: 666-667). His education and skills took him to the court of İpşir Pasha, the governor of Damascus District in Aleppo (el-Muhibbî. 2010: 240; Ahmed İsa, 1942: 222-223). In 1654, when İpşir Pasha was appointed Grand Vizier of the Ottoman Empire, Salih bin Nasrullah followed him to İstanbul (Şeyhi Mehmet Efendi, 2018: 672).

In İstanbul, Salih bin Nasrullah initially worked as a Sultan's *Hassa Hekim* (Royal Physician). He joined *atibbā-i hāssa* (Court Physicians) service in 1655 before being appointed to Fatih *Darüş-Şifa* as *başhekim* succeeding Hammalzāda Mehmed Efendi. Most sources agree that he held this position from August 1656-August 1669. However, Afyoncu's study suggests that Salih bin Nasrullah served as a chief physician from August 17, 1660-September 23, 1669. The predominant position is that with this elevation to the higher office, he was given the district of Tekfurdağı (Tekirdağ) as *an Arpalık* (benefice) (Baltacı, 1991: 392-393, Rodoscuk Şer'iyye Sicili, No:1596: 5, Rodoscuk Şer'iyye Sicili, No: 1596:

44).[1] However, Ottoman sources reveal that on the date of Nasrullah's elevation as *başhekim*, August 17, 1660, the Tekirdağ district was not granted to him as an *Arpalık* (Rodoscuk Şer'iyye Sicili, No:1596: 5). Instead, it appears that the former kadi of Istanbul, Mustafa, continued the district's possession on January 21, 1661. The sources further reveal that Tekirdağ's district was transferred to Nasrullah as a beneficiary between August 17-26, 1661 (Rodoscuk Şer'iyye Sicili, No: 1596: 44).

Afterwards, he served as the Kadi of Macca and Istanbul and the Anatolian *Kazasker (qadi 'asker),* respectively (Afyoncu, 2006: 89-93).[2] Salih bin Nasrullah died on 31 August 1669 in Yenişehir (Lárissa) in Thessaly (Bağdatlı İsmâil Paşa, 1920: 293, 294). His works of repute, having a significant impact on the Ottoman medicine field, are as follows:

- *Gāyetü'l-beyân fî tedbîri bedeni'l-insân,*
- *Ġāyetü'l-itḳān fî tedbîri bedeni'l-insân.*
- *Akrâbâzîn.*
- *Bür'ü's-sâa*

Salih bin Nasrullah and Tıbb-ı Cedid

Before the emergence and prominence of the *Tıbb-ı Cedid*, the traditional method of medicine called Avicenna (Ibn Sina) medicine or Galen medicine was predominantly practiced in the Ottoman Empire (Shefer, 2011: 122). As Europe underwent massive transformations during the 15th-16th century period, Paracelsus, the Swiss-German Physician, pioneered the revolution in the medical field. Known as the "Luther of medicine," Paracelsus is considered one of the founders of modern medicine and chemistry (Debus, 1965: 35, Debus, 1972). He developed his iatrochemistry movement based on the knowledge and experience of barbers, herbalists, magicians, alchemists, and healers. The iatrochemistry movement considered all beings consisting of the four elements: earth, water, air, and fire, and materia prima called salt, mercury, and sulfur (Koç Aydın, 2016: 109). With its roots in Islamic alchemy, this movement developed and spread with Paracelsus, impacting Western and Ottoman medicine.

Salih bin Nasrullah was strongly influenced by the works of Paracelsus and introduced these to Ottoman medicine. Nasrullah studied the methods of Paracelsus and other proponents of the iatrochemistry movement, such as Oswald Crollius, Daniel Sennert, and Johann Jacob Wecker, who used chemical and synthetic substances in their treatment and drug-making processes by using inorganic compounds. By combining these methods with his knowledge, Salih bin Nasrullah initiated a new phase in Ottoman medicine history known as *Tıbb-ı Cedid* (Kolta, 1981: 93-97, Shefer, 2011: 102-123, Savage-Smith, 1987: 4, Boyar, 2018: 213-241). The beginning of this period in the Ottoman world marks the end of alchemy and the beginning of modern chemistry (Koç Aydın, 2016: 110).

Salih bin Nasrullah presented his views on *Tıbb-ı Cedid* in *Eṭ-Ṭibbü'l-cedîd al-kimyaʾî*, considered his most important work. Although it is the first part of the last chapter of his Arabic book, *Ġāyetü'l-itḳān fî tedbîri bedeni'l-insân,* many consider it a separate book in the field of medical literature. The book contains preparations in the Galenic tradition, such as ointments, pastes, pills, and treatment

[1] In the Ottoman Empire, Arpalık was a form of income or pension provided to civil servants in addition to their salaries, either while in service or after leaving their job. Contrary to the assertion in modern studies that the Tekirdağ district was regularly granted to chief physicians as a beneficiary, the appointment records found in the kadi registers indicate this was not always the case. In fact, on the date of Salih b. Nasrullah's appointment, 10 Dhul-Hijjah 1070 (August 17, 1660), the Tekirdağ district was not granted to him as a beneficiary. Instead, it appears that the district was still in the possession of the former kadi of Istanbul, Mustafa, on January 21, 1661, in Rodoscuk Şer'iyye Sicili, No:1596. According to our research, the Tekirdağ district was transferred to Salih b. Nasrullah as a beneficiary between August 17-26, 1661 in Rodoscuk Şer'iyye Sicili, No: 1596.

[2] Afyoncu's findings are more credible due to his use of Ruus notebooks, a type of source not utilized by other researchers, which provide information about appointments; Afyoncu, 2006: 89-93.

methods using drugs with specified preparation methods similar to those used in Turkish medical folklore today (Erdemir Demirhan, 1996: 201, Demirhan, 1983: 163-186, Adıvar, 1943: 131, Sarton, 1931).[3] It is generally believed that *eṭ-Ṭibbü'l-cedîd el-kimyâʾî* was translated from Latin to Arabic. Some scholars argue that Salih bin Nasrullah knew Latin based on the assertions that he converted to Islam from Christianity (Catholic) (Bayat, 1999: 69, Bayat, 2016: 307, Aydüz, 2016: 132, Kavalalı, 1993: 279, Dinar, 2012: 1542, Erbil, 2000: 6-8, Şehsuvaroğlu, 1970: 293-298, Erdemir, 1996: 195-202, Özçelikay and Asil, 1998: 249-252). However, these claims of Nasrullah's Christian past and subsequent conversion appear in modern sources but lack any substantiation by either Ottoman and Arabic sources or his works.

This conversion story first appears in Adnan Adıvar's book, *"Osmanlı Türklerinde İlim"* (*Science in Ottoman Turks*) (Adıvar, 1991: 130-132). However, Adıvar surprisingly fails to provide any source to authenticate his claims. Other modern research echoes this information. While it is possible that Salih bin Nasrullah had the aforementioned work translated from Latin to Arabic, it is necessary to examine all of his works in detail to have a definite opinion on this issue. The claim of Natalia Bachour, who has prepared an academic thesis on this subject, is in this direction (Bachour, 2012). In his investigation, Paul Richter argues that the chapter *eṭ-Ṭibbü'l-cedîd al-kimyaʾî,* written using Latin sources, does not solely rely on Paracelsus' ideas and theories but references the works of other German physicians as well (Kırbıyık, 2009: 42). Richter clearly details parts of *eṭ-Ṭibbü'l-cedîd el-kimyâʾî* referencing the works of Paracelsus and German physicians.

It is inevitable for translated works to reflect the views and experiences of the translator, as well as the dominant understanding of science in society. In this respect, *eṭ-Ṭibbü'l-cedîd al-kimyâʾî* was acknowledged by other Ottoman physicians, with many physicians translating it into Turkish. These prominently include reputed physicians such as Süleyman Efendi, the son-in-law of Hayatizade Mustafa Feyzullah, one of the palace physicians, Gevrekzâde Hafız Hasan Efendi, and Ömer Şifai. Over time, their works validated Nasrullah's works and helped propagate his *"Tıbb-ı Cedid"* movement (Dinar, 2012: 1443).

As Salih bin Nasrullah's new medical advances and exploits echoed across Royal corridors, it brought him support from none other than the Ottoman Sultan Mehmet IV. On the instructions of the sultan, Nasrullah, *başhekim*, compiled *Ġāyetü'l-itḳān fî tedbîri bedeni'l-insân* (in Turkish), which primarily gave insight into many diseases and their curable drugs. As he presented this easy-to-understand, systematic, organized, practical handbook to the Ottoman Court, Mehmet IV rewarded him with sable fur, one of the symbols of prestige and wealth of the period (Adıvar, 1943: 131). Salih bin Nasrullah impressed the court that the public needed to be made aware of new pioneering medical advances happening in the empire (Bayat, 2016: 309). His assertions accrue importance in highlighting his awareness of the scientific developments in the western world.

Questions have often been raised about Salih bin Nasrullah's contribution to the works of *eṭ-Ṭibbü'l-cedîd al-kimyâʾî* or *At-tıbb al-Cedid al-Kimyai Alladi'htara 'ahu Barakalsüs* (New Medical Chemistry Discovered by Paracelsus). In his investigation, Kemal Sabri Kolta argues that Salih bin Nasrullah's book does not directly translate Paracelsus' work. Instead, it is evident that Nasrullah benefited from the works of European physicians of the iatrochemistry school of Paracelsus and synthesised those with his knowledge and experience to create a new tradition in the Ottoman medical field. Kolta further asserts that one finds Salih bin Nasrullah repeatedly mentioning Paracelsus in his work because of an old tradition in the East. Following his predecessors and the standard research practice, the Ottoman *başhekim* connects his theories with previous scholars' works like those of

[3] Nicolaus Myrepsos, a Western author, is mentioned in the section on compound drugs in Salih b. Nasrullah's work. Myrepsos makes significant contributions to the study of compound drugs, particularly ointments, in his book Dynameron, completed in 1280. It is likely that Salih b. Nasrullah encountered this book in a Latin translation or through an Arabic book that drew upon it.

Paracelsus to demonstrate his field knowledge and validate his claims, as he aspired to earn the title of "Paracelsus of the Islamic world" (Kolta, 1981: 98).

Although Salih bin Nasrullah's work on new chemical medicine inspired further studies in this field and sparked a trend, it did not bring about a radical transformation in Ottoman medicine. While the *"Tıbb-ı Cedid"* period persisted until the end of the 18th century, traditional medicine continued to be used by Ottoman practitioners. Eventually, it was replaced by newer medical concepts (Sarı, Zülfikar, 1992 p. 166, İnalcık, 2013). Even at the end of the 18th century, as Europe was moving away from Galenic medicine, most physicians in the Ottoman provinces continued following Ibn Sina's Laws of the 11th century (Shefer, 2011: 122).

Conclusion

This article examined Salih bin Nasrullah's biography, focusing on his contributions to Ottoman medicine. Some disputed aspects of his life were also addressed, including claims of his conversion to Islam from Christianity (catholic). This study found no evidence to support such a claim in either the Ottoman (Turkish) and Arabic primary sources or later sources.

Another finding of this study concerns the duration of Salih b. Nasrullah's service to the Ottoman Palace as *başhekim* with most sources holding that he served August 1656-August 1669. However, Afyoncu's study suggests his *başhekim* service period from August 17, 1660-September 23, 1669. This study found Afyoncu's information more plausible, as he cites *Ruus* register, a resource providing information about appointments, which other researchers overlook.

It also invalidates the claim that the Tekirdağ district granted to Salih b. Nasrullah was a beneficiary upon his appointment as chief physician. Contrary to the notion in modern research that the Tekfurdağı district was regularly granted to *başhekims* as a beneficiary, this research indicates, based on the examination of appointment records in the kadi registers, that it was not the norm. In fact, the sources referred to here reveal that Salih bin Nasrullah did not receive the district as a beneficiary upon his appointment on August 17, 1660, as it continued being under the control of Mustafa, the old kadi of Istanbul, on January 21, 1661. It is revealed here that Tekfurdağı district was eventually transferred to the Royal Chief Physician between August 17-26, 1661.

One of the prominent but controversial issues concerning Salih b. Nasrullah's life is about the languages he knew. While many modern researchers assert that he was proficient in several Western languages, particularly Latin, neither primary sources nor Nasrullah's works evidence this.

Another point of contention is the claim that Salih bin Nasrullah translated *eṭ-Ṭibbü'l-cedîd al-kimyâ'î* from Paracelsus' Latin work. Some authors, such as Paul Richter and Kolta, acknowledge that Nasrullah was influenced by Paracelsus' work and may have even used it as a source but argue that *eṭ-Ṭibbü'l-cedîd al-kimyâ'î* is an original, copyrighted work that contains new ideas and insights. This study maintains that while *eṭ-Ṭibbü'l-cedîd al-kimyâ'î* is an original work, Salih bin Nasrullah may have consulted Paracelsus' work and drawn inspiration from it. The studies on the Ottoman physicians known in the literature repeat each other in some aspects and accept the general assumptions presented in previous studies as they are. However, as this study suggests, new studies on these physicians will lead to the emergence of more consistent biographies of Ottoman physicians. For this reason, revisiting and analysing known physician biographies will contribute positively to the history of Ottoman medicine.

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