



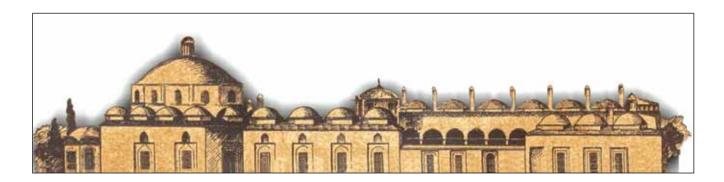
# Edirne Sultan Bayezid II Hospital

# Edirne Sultan II. Bayezid Darüşşifası

Enver SENGUL

Former Director of the Trakya University Sultan Bayezid II<sup>nd</sup> Complex Health Museum

Corresponding Author: Enver SENGUL / E-mail: enversengul@gmail.com



# Hospitals and the Development of Hospitals in Turkish Architecture

The health and education institutions that were established based on Foundation tradition starting from the Umayyad and Abbasid, and especially in the Seljuk and Ottoman periods in the Turkish-Islam civilization where the patients were treated without expecting anything in return and health information based on practice and observation were provided were named "Darüşşifa". It is derived from words of Arabic origin, dar (door, house, place, locus) and şifa (treatment, recovery), and means door of cure or house of cure. Ferit Devellioğlu describes "darüşşifa" as a "Home of Cure" in the Ottoman-Turkish Encyclopedic Lexicon.

Hospitals were also called with names such as Dârü's-sıhha, dârü'l-afiye, şifahane, bimarhane, bimaristan, mâristan or mental house and provided curative health care services. The Edirne Hospital is mentioned in the Islamic complex deed of trust, Evliya Çelebi Travelogue and the Edirne Rehnüma of Dr. Rıfat Osman Bey "

Hospitals follow a particular architectural style. Most were built with four iwans around a courtyard. Edirne Sultan Bayezid the II<sup>nd</sup> Hospital is outside this understanding in terms of architecture, as will be discussed later.

### **EDİRNE SULTAN BAYEZID II<sup>nd</sup> HOSPITAL**

## History

One of the most important Turkish-Islam hospitals where treatment with music was conducted is the Edirne Sultan Bayezid II<sup>nd</sup> Hospital. This hospital may be said to be the



Figure 1: Sultan Bayezid II.

peak of music therapy in history. The use of music was not arranged in such a systematic form at any other hospital. The consideration of a music stage and also emphasizing the



Figure 2: The hospital was mostly decrepit in the 1950s.

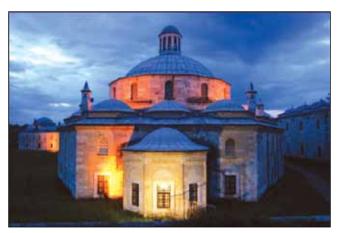


Figure 3: Edirne Sultan Bayezid the II<sup>nd</sup> Hospital.

acoustics of the environment are the most important details of the construction of this hospital where not only music but also the complementing and augmenting sound of water were used to provide relief to patients.

"Darüşşifa" is one of the most important complex buildings and was an all-purpose hospital in 15th century when it was established. When we look at the staff of physicians in the first years, surgeons and ophthalmologist (kehhal) are found among them.

15th and 16th centuries are the brightest periods of Edirne. Edirne, which became one of the most important five cities of Europe at that period, was a state center and its borders extended from Gümülcine to Silivri. This regional power was also apparent in Edirne Hospital where patients with mental disorders were treated with music along with the other patients.

The year 1821 is the end of a very long period that brought peace, comfort and wealth to Edirne. Edirne experienced the first of 4 invasions this year and the city was invaded by the Russians

However, the foundation system becoming dysfunctional with the Ottoman Empire entering the regression period, the wars, and the state becoming increasingly weakened economically and technically did not compromise the services of Sultan Bayezid the II<sup>nd</sup> Complex. The hospital was started to be used completely for the isolation and treatment of patients with mental disorders in this period. It became an isolation facility after the 1870s.

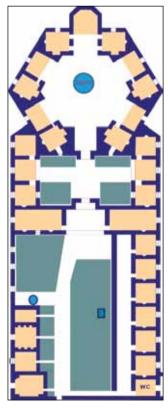
#### The Sections of the Hospital

One of the most important characteristics of Sultan Bayezid the II<sup>nd</sup> Hospital is that it was planned as a hospital with all its details. No such detailed planning was found in previous hospitals. The hospital was built in the form of different sections and each section had different functions. The hospital had 3 main parts. resting part of the hospital.

- Outpatient and service rooms were inside the wide and spacious courtyard in the first section.
- The second section was the part where administrative rooms were present.
- The inpatient treatment department was in the third section and this is the most interesting part of the hospital.

#### **First Courtyard:**

The first courtyard is rectangular. There are 6 rooms that open to a domed portico landing sited on 10 marble columns on the right side of the east entrance. The windows of the rooms open to the outer garden. They each have one stove. There are 4 more adjacent rooms side by side at the left side of the east entrance. One of them is a little larger than the others and



**Figure 4:** Darüşşifa plan.

protrudes towards the south. The ceilings of the first three rooms are covered with domed lanterns. There is a well with a stone ring between the fourth room and the north door.

There is a landing covered with a dome between the end of the first courtyard and the second courtyard door. There are two large halls at the right and left of this landing. There are two stoves and two windows in each of these halls. One of the windows faces the outer garden, and the other faces the first courtyard.

#### Second Courtyard:

One enters here through the marble arched door at the end of the first courtyard landing. The upper part of the door is interesting for its stonework. The second courtyard is again rectangular and has 4 rooms with doors opening to a hall at the right and left of the courtyard. One each of the two windows of the first rooms on the right and left faces the courtyard and the other the outer garden. The adjacent rooms have single windows facing the outer garden. As in all other rooms, one stove is present in each room. One of the 4 rooms in this section is thought to belong to the head physician and the others to the physician and other officials.



Figure 5: Darüşşifa first courtyard.



**Figure 7:** Appearance of the inpatient treatment department from above.

### Inpatient Treatment (Şifahane) Department

One enters this part through a door from the second courtyard. This structure is built around a center covered by a dome with a large lantern at the middle and 12 small domes surrounding it. A pool with a 12-cornered fountain is found right under the large dome lantern and in the middle of the big hall.

The inpatient treatment department has a very interesting architecture and a hexagonal structure. There are six closed winter patient rooms on each side of this hexagonal structure. The doors of four of these rooms open to four arched summer rooms that are accessed by one step stairs from the hall, with shoe spaces underneath and open-arched frontal aspects facing the hall. The doors of the remaining two rooms open directly to the middle hall.

There is an arched section with an open face and an arch right across the entrance door, as in the other summer rooms. Its difference from the other open sections is the wider structure towards the inside and the presence of five windows.



Figure 6: Second courtyard of Darüşşifa.

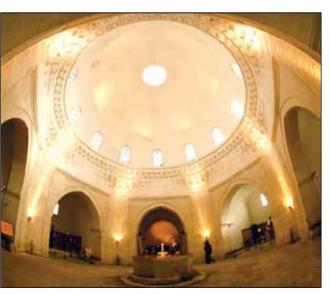


Figure 8: Inpatient treatment department.

This section that dominates the middle area is thought to be the music stage (the room shown with number 23 on the plan).

The inpatient treatment room formed by rooms viewing the large central area indicates a desire to provide more service with a small number of staff. Besides, Dr. Rıfat Osman Bey writes "The patients in the rooms with open doors can always be kept under control with a small number of staff as patient rooms open to the courtyard with the pool." A detailed study of this section was again conducted by Terzioğlu. The issue of acoustics of the building, which is very important in terms of performing music, was especially investigated and it was revealed that dimensions that emphasize this characteristic was used in the structure on purpose.

One of the most significant characteristics of Edirne Hospital is the presence of a pool with sprinkler right under the central dome and right in the middle of the floor. Many researchers and especially Ratip Kazancıgil report that the purpose of this pool was to provide a peaceful environment for treatment. Verbal culture also contains the information that this pool was used for treatment.

Evliya Çelebi wrote "some of them look at the water running from the pool and fountain and speak dreamy words" about the treatment of inpatients with mental diseases here.

Considering that Edirne Hospital is the first versatile and planned hospital of Turkish Islamic architecture, the fountain placed in the middle is part of the plan. The lack of taps around the fountain with the water running only from the sprinkler indicates that the pool was mainly added for visual enrichment.

It is quite possible that the patients were thought to be healed due to the water in this place with perfect acoustics reaching the patients lying in their rooms and relieving them with the echo of the sound and visual effects as well the music.

#### TREATMENT WITH MUSIC AT EDIRNE HOSPITAL

Physical and mental diseases were treated with music at Nureddin Hospital in Damascus and then at many Seljuki and Ottoman hospitals.

It is known that one of the centers where this treatment was performed in the Ottoman Empire was the Edirne Hospital.

We may say that this hospital is the peak of treatment with music in history. As we mentioned before, the use of music was not arranged in such a systematic form at any other hospital. Not only music but also the sound of water that completes and maybe increases the effect was used in order to relieve the patients.

Considering a music stage in the construction of this building and emphasizing the acoustics of the environment are other striking issues.

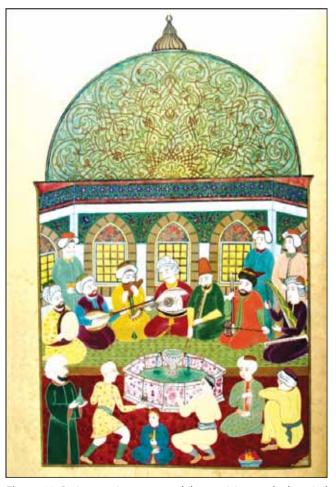
Evliya Çelebi describes treatment with music at Edirne Hospital in his Travelogue in detail. He even provides information on the music instruments played at this place and the number of singers and players.

Treatment with music was implemented not only for mental disorders but also for physical diseases at this hospital, which has an important place in medical and architectural history.

Evliya Çelebi provided the most detailed observation and description regarding the performance of treatment with



Figure 9: The Fountain located in the center of Edirne Hospital.



**Figure 10:** Patient environment and the musicians at the hospital (16) (Reprinted with permission).

music in the hospital. Then, researchers such as Dr. Rıfat Osman, Ord. Prof. Dr. A. Süheyl Ünver, and Dr.Ratıp Kazancıgil suggested that treatment with music was one of the treatment tools at the hospital. Arslan Terzioğlu writes "the perfect acoustics provided by the hospital building planned around a center demonstrate that this hospital was built by the Architecture Hayrettin while considering treatment with music even at that time".

Dr. Osman Şevki Bey states that the relationship of music with medicine had been known for a very long time, that psychotherapy with music was implemented in Fatih in istanbul and the Bayezid Bimaristan in Edirne and that the patients were relaxed with the harmony of the music and were seen to forget their suffering to be treated accompanied by musical tunes.

O. Nuri Peremeci writes that the rumors about treatment with music have gone on circulating in Edirne until recent times.

Ord. Prof. Dr. A. Süheyl Ünver who committed a big part of his life to doing research on Edirne and is devoted to this city sufficiently to say "I now live for Edirne" also studied the Ottoman period health institutions of Edirne and especially emphasized Edirne Hospital, stated the following: "The effect of this procedure was also seen in those accompanying the patients who came here (Edirne Hospital. E.Ş.) with mental weakness. Science has now accepted that mental disorders can be treated with music"

# The Observations of Evliya Çelebi About Treatment with Music

When Evliya Çelebi came to Edirne in 1652, he also visited the hospital and provided detailed information about the general situation here and treatment with music. The detailed information and descriptions of Evliya Çelebi describe the treatment with music in these places in definite detail.

Evliya Çelebi mentioned the treatment with music performed at the hospital as follows:

"Deceased and Respectful Bayezid Veli Hazretleri employed 10 young male singers and musicians in his Foundation as a cure for the patients, food for the soul of mentally deranged people; three of them were singers, one was a neyzen, one a violinist, one played the musikar,¹ one the santur², one the çeng³, one the çeng santur and one the ud and they gathered 3 times a week and played music to the patients and the mentally deranged people. Many others like the sound of the instrument and feel more comfortable, God willing.



Figure 11: Edirne hospital inpatient treatment section.



**Figure 12:** Music was played according to the diseases of the patients at Darüşşifa (Tümata) (Reprinted with permission).

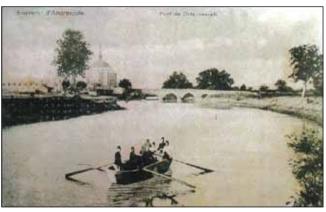


Figure 13: A photograph of the complex a hundred years ago.

<sup>1</sup> Musikar: 1- An instrument of ciğirtma class played with the mouth. It has two types named girift and battal. It is an old instrument produced by the connection of two neys together and makes a sound by blowing into the tube. 2- An instrument similar to pan flute used in Turkish music before the 18th century.

<sup>&</sup>lt;sup>2</sup> **Santur:** One of the oldest musical instruments in the history of culture and art. It is similar to kanun in form. It is an instrument of Hebrews and has spread to Europe after the 11th century.

<sup>3</sup> Çeng: An instrument similar to the harp of today and resembling kanun, played by holding it straight. Of the edged harps that were used in Central Asia and Far East besides the Anatolia, Mesopotamia and Egypt civilizations for thousands of years, the one that disappeared last from history is the Ottoman "çengi".

In fact, the neva, rast, dügah, segah, çargah, suzinak tunes in music science is specific to it. However, rast in zengule tune and buselik tune revitalizes the person. There is food for the soul in all music instruments and tunes."

It is possible to extract the following from those described:

Treatment with music was conducted in the hospital to heal the patients in 1652. There was a group of 10 musicians for this purpose and this group organized music sessions three days a week at the hospital. Three of them sang and the others played. Ney, santur, çenk, violin, mıskal and ud were among the music instruments. Various tunes of Turkish music were played during this activity. The tunes played included neva, rast, dügâh, segâh, çargâh, suzinak, zengule and buselik. Treatment with music was used not only for patients with mental problems but also for other patients.

Evliya Çelebi was a musician himself and received music lessons from Dervish Ömer Gülşeni who was the music master of the period, making makes his opinions on the matter more valuable.

Evliya Çelebi mentions the positive effect of not only the music but also the nice smells at Edirne Hospital on human health. "They give flowers such as sim and narcissus, gooseneck,



**Figure 14:** Re-enactment of treatment with music in the Health Museum.

müşk-i Rumi, jasmine, rose, gillyflower, cloves, sweet basil, tulip and hyacinth and these heal the patients with their nice smells" It is interesting that the effects of nice smells on the human soul was considered in addition to music and implemented in this hospital in 1652.

Şuuri also mentioned which tunes are good for which diseases and also which tune affected which class of people more.

## Accordingly;

- Rast tune is effective on the ulama council (community)
- İsfahan tun on ümera (emirs, beys, seids) council



**Figure 15:** Evliya Çelebi came to the hospital in 1652 and wrote in detail what he had seen.



**Figure 16:** The instruments used for treatment with music in the hospital in the 16th century. Ud, kabak kemane, rebap, ney, santur and ceng.

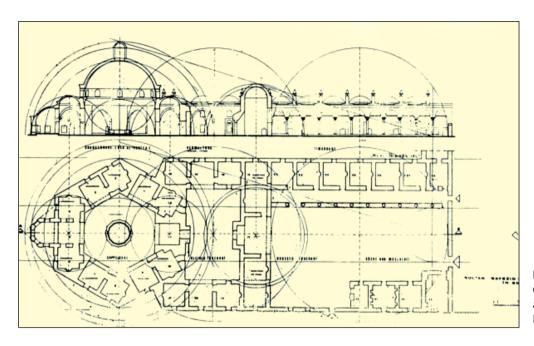


Figure 17: Plan 14-Geometric proportions and acoustic plan of the Hospital (Arslan Terzioğlu).

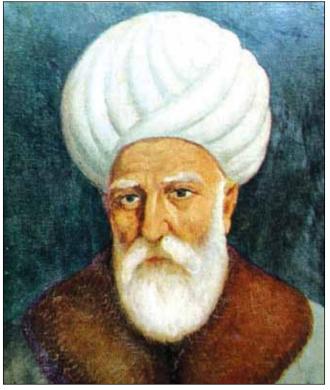


**Figure 18:** A miniature of the book of Sabuncuoğlu Şerefeddin who was a physician at Amasya Hospital for 14 years (Cerrahiyetü'l Haniye).

- Hicaz tune on the council of dervishes
- Rehavi tune on the sofian council.

Şuuri Hasan Efendi explains which tune is good for which disease in couplets in the same piece as follows:

- Rast Tune: It is the cure for stroke.
- Irak Tune: It is useful for quick tempered people, lightheadedness and palpitations.
- İsfahan Tune: It opens the mind, increases the intelligence, renews the memories.
- Zirefgent Tune: It is useful for back and joint pains and cramp treatment.
- Rehavi Tune: It is useful for headache and anxiety.
- Büzürk Tune: It is good for febrile illness, clears the mind, keeps fear away.



**Figure 19:** Head physician Gevrekzade Hasan Efendi (Oil painting of the artist Şeref Akdik) İstanbul Medical Faculty Chair of the History of Medicine archive.

- Neva Tune: It is good for the Irk'un nisa (gynecological diseases).
- Zengule Tune: It is the cure of heart diseases.
- Hicaz Tune: It is good for urination difficulty and is sexually stimulating.

Former Turkish physicians also suggested that the hüseyni tune was more effective on Arabs, the Irak tune on Persians, uşşak tunes on Turkish people and the buselik tune on Greeks and Franks.

#### **REFERENCES**

- Ak AS: Avrupa ve Tük İslam Medeniyetinde Müzikle Terapi Tarihi Gelişim ve Uygulamaları. İstanbul: Ötüken Yayınları, 2006
- Altinılcek H: Bir İletişim Aracı Olarak Müzik ve Müzikle Tedavi Yöntemleri. Eskişehir: 1998
- Aslanapa O: Osmanlı Devri Mimarisi. İstanbul: İnkılâp Yayınları, 2004
- 4. Bayülkem F: Türkiye'de Psikiyatri- Nöroloji ve Nöroşirürjinin Tarihi Gelişimi. İstanbul: Pentamed, 2000
- Cantay G: Anadolu Selçuklu ve Osmanlı Darüşşifaları. Ankara: Atatürk Kültür Merkezi, 1992:61
- Danisman Z: Evliya Çelebi Seyahatnamesi, cilt: 6. İstanbul: Zuhuri Danışman Yayınevi, 1979: 21-25
- 7. Efendi HS: Tacü't Tevarih. Parmaksıoğlu İ (Sadeleştiren), cilt: 3, 1. baskı. İstanbul: Kültür Bakanlığı, 1979
- 8. Efendi GH: i, er Risaletü'l –musikkiye mine'd devai'r-rühaniyye. TMSK nr.571/2, İstanbul
- 9. Efendi HS: Tacü't Tevarih. Parmaksıoğlu İ (Sadeleştiren), cilt: 3, 1. baskı. İstanbul: Kültür Bakanlığı, 1979
- 10. Efendi GH: i, er Risaletü'l –musikkiye mine'd devai'r-rühaniyye, TMSK nr.571/2, İstanbul
- 11. Grebene Bekir: Müzikle Tedavi. Ankara: Ankara Matbaası, 1978

- 12. Guvenc RO: Türklerde ve Dünyada Müzikle Ruhi Tedavinin Tarihçesi ve Günümüzdeki Durumu (Doktora Tezi). İstanbul: İstanbul Üniv.ersitesi, Metinler Matbaacılık, 1997
- 13. Guvenc RO: Türk Musikisi Tarihi ve Türk Tedavi Musikisi. İstanbul: Metinler Matbaacılık. 1985
- 14. Kazancigil R: Sultan II.Bayezid Külliyesi. Edirne: Trakya Üniversitesi, 1997
- Kazancigil R: 1362-1920 Yılları Arasında Edirne İlinin Sağlık Kurumları ve Bu Kurumlarda Çalışan Personel. İstanbul: Eren Basımevi, 1981
- Sari Ni: Osmanlı Darüşşifalarına Tayin Edilecek Görevlilerde Aranan Nitelikler. Yeni Tıp Tarihi Araştırmaları 1. İstanbul: 1995:11-54
- 17. Sengul E, Bilar E: Darüssifa. Edirne: Trakya Üniversitesi, 2007
- Terzioglu A: Osmanlılarda Hastaneler, Eczacılık, Tababet ve Bunların Dünya Çapındaki Etkileri. İstanbul: 1999
- Terzioğlu A: Temel Atılışının 500. Yıldönümü Münasebeti İle Edirne'deki II. Bayezid Hastanesi ve Tıp Tarihi Açısından Önemi. Bifaskop, sayı 15: 1999
- 20. Terzioğlu A: Edirne'deki II. Bayezid Hastanesi ve Tıp Tarihi Açısından Önemi. Bifaskop, sayı 6:1985
- 21. Turabi AH: Gevrekzade Hafız Hasan Efendi ve Musiki Risalesi. İstanbul: Rağbet Yayınları, 2005
- 22. Ünver S: Edirne'nin Tıp Tarihimiz Noktasındaki Ehemmiyeti. İstanbul: Becid Basımevi, 1958
- 23. Unver S: Edirne Darüşşifası Tarihi 891-1486. Türk Tıp Tarihi Arşivi, 1940:18