

EATING HABITS OF OTTOMAN SULTANS AND ITS RELATION WITH THE METABOLIC SYNDROME

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ABSTRACT

Metabolic syndrome is considered as a metabolic disease that is consist of a series of complications caused by today's postmodern process. On this work, relation between eating habits of sultans that acceded to throne of Ottoman Empire -which is known with its richness of kitchen habits and extraordinary foods- and Metabolic Syndrome is investigated. Published books which were documenting about health states of Ottoman sultans were used as source of information. Government of Ottoman or Ottoman Empire (in Ottoman Turkish: Devlet-i Aliyye-i Osmaniye) had kept on its presence between years 1258-1922. On this duration of time, sum of 36 sultans acceded the throne of Ottoman Empire and they had reigned approximately 700 years. Ottoman kitchen which is one of the richest kitchens in the world, today still remembered with its abundance, richness and tables of banquet. Metabolic Syndrome is an illness which is characterized with obesity (=fatness, especially abdominal obesity) and sedentary style of life. Beyond doubt, the most important determinative factor which causes obesity is eating habits. In this work, the relation between palace life - that is characterized with sedentary life style and over-eating even at pre-modern age - and togetherness of metabolic syndrome and cardiovascular disease on the throne of Ottoman Empire is being explained.

Key Words: Ottoman Palace, Eating Habits of Sultans, Senior of Physicians (Hekimbaşı) in Ottoman Empire, Sultans and Their Illnesses.

INTRODUCTION

Metabolic syndrome is sum of risk factors which causes cardiovascular disease. These metabolic risk factors are increasing numbers of hypertension, dyslipidemia, prothrombotic agents and pro inflammatory factors (1). Abdominal obesity and insulin resistance are two most significant determinatives of metabolic syndrome. One of the two most important factors that causes abdominal obesity is eating habits, and the other is sedentary life style (2). ACE-ACCE criterions that take part in diagnosis criterions of metabolic syndrome

consist of hypertension, obesity, diabetes mellitus and dyslipidemia (3). Eating habits have so severity roles in occurring of these diseases. With the help of information sources that ensures us to know about Ottoman Empire and published books which document Ottoman sultans' health states; sultans' eating habits, health problems and causes of their deaths are investigated for making relations with metabolic syndrome.

Government of Ottoman or Ottoman Empire (in Ottoman Turkish: Devlet-i Aliyye-i

Osmaniye) had kept on its presence between years 1258-1922. On this duration of time, sum of 36 sultans acceded.

The throne of Ottoman Empire and they had reigned approximately 700 years (4). In some sources it occurs that scientific developments and human health are considered to be important in Ottoman Empire. An institution called “Hekimbaşılık” (some kind of senior of physicians) had been established for diagnosis, treatment and prevention from illnesses in the period of Sultan Fatih. At first, seniors of physicians (Hekimbaşılar) were only stuck with treating sultan and his family but later on it becomes a main chair in government’s health assignment. (5)

Seniors of physicians (hekimbaşları) or the physicians of palace that assigned for health had the job which is similar to today’s “Ministry of Health” (6). Establishment of Senior of physicians (Hekimbaşılık) had lost its importance after the establishment of “School of Medicine” (Tıbbiye) and annulled around 1850 (5).

From the period of Fatih, health problems and probable death causes of sultans were recorded with the help of senior physician’s diagnosis. At the same time it can be observed that senior physicians were making eating plans and treatments. Even the properties of Ottoman Palace’s gastronomy and its applications may show some alterations from sultan to sultan and palace to palace, they also have common points that can be seen in every period (3).

It’s known that meals of Ottoman sultans were being cooked in kuşhane kitchen by cookers (kuşçubaşı) whom were employed for only cooking for the sultan with ultimate care and attention. Oncoming years, meals that were cooked for the sultan began being cooked in kitchens of harem suite for the purpose of checking security.

On the first tour of meal, sheep and lamb meat were preferred and on the second tour it goes on with chicken or turkey that filled with pilaf stirred with pinon, grape, chestnut, liver and mixture of spices. After that some seasonably vegetable foods with plenty of meat was served with a special kind of spicy pilaf in a tray with quail meat and brain. Meals were generally ending with baklava (a kind of traditional dessert) made with nut, pistachio and cream on it. At Ottoman dinners it’s known that sherbet and compote were used instead of water. In Ottoman kitchens unlike ordinary folks; rice, sugar and white leavened bread were used instead of bulgur, boiled grape juice or honey and dark bread or yufka (a kind of thin, round and unleavened flat bread). On some sultans’ period some kinds of foods were much popular. On every dinner table of sultan Fatih, it’s known that Offals are served with the food that made of meat and 7-8 kinds of halva like flavored with musk and rose juice, cotton and almond halvah are also served (7). Generally it is stated that foods with high saturated fat levels, rich in calorie, triggering gain in weight, causing rapid high glycemia are consumed in Ottoman Empire.

Documents that reached from Ottoman Empire shows us that %81 of dynasty members are at least one time portrayed as abdominal obese or recorded as overweighted in palace records (2).

Metabolic Syndrome and Eating Habits in Ottoman Emperors Symbols:

† = **Obesity**, †† = **Coroner Problems**, ††† = **Hypertension**, †††† = **Diabetes Mellitus**, ††††† = **Gout**, †††††† = **Sleeping Apnea**, Ω = **Symbolizes eating habits that can be risky for metabolic syndrome.**

OSMAN BEY(Osman Gazi) (1258-1326)

(†, ††††† - Ω)

Life Time and Monarchy Period: He spent 25 years as a ruler of 68 year life time (8).

Eating Habits: Meat, whole milk, yogurt, milk pudding made from whole milk and other desserts (9).

Health Problems and Probable Cause of Death: Obesity, Gout Disease and symptoms related to gout (8).

ORHAN GAZİ (1281-1362)

(††, ††† - Ω)

Life Time and Monarchy Period: He spent 38 years as a ruler of 81 year life time (8).

Eating Habits: Meaty meals, whole milk (4).

Health Problems and Probable Cause of Death: Cardiac Insufficiency, Hardening of the Arteries, Hypertension (8,9).

SULTAN 1. MURAT (1326-1389)

(† - Ω)

Life Time and Monarchy Period: He spent 27 years as a ruler of 63 year life time (4).

Eating Habits: He likes all kinds of food (10).

Health Problems and Probable Cause of Death: Obesity (8). His cause of death is unknown (2).

SULTAN YILDIRIM BEYAZIT (1360-1403)

(† - Ω)

Life Time and Monarchy Period: He spent 14 years as a ruler of 43 year life time (8).

Eating Habits: Meat, whole milk, yogurt, milk pudding made from whole milk and other desserts (4).

Health Problems and Probable Cause of Death: High Fever, Shortness of Breath, Cerebral Hemorrhage, Paralysis, Obesity, Hypertension (8,9).

MEHMET ÇELEBİ (1389-1421)

(†, ††† - Ω)

Life Time and Monarchy Period: He spent 8 years as a ruler of 33 year life time (8).

Eating Habits: Regular and ground game meat (11).

Health Problems and Probable Cause of Death: Hypertension, Cerebral Hemorrhage. He was also obese. In some sources it's stated that his brother Süleyman Çelebi was an alcoholic and his son died because of paralysis too (8).

SULTAN 2. MURAT (1402-1451)

(†, ††† - Ω)

Life Time and Monarchy Period: He spent sum of 29 years as a ruler of 49 year life time. He acceded to the throne two times (23+6), (4).

Eating Habits: Meat, whole milk, yogurt, milk pudding made from whole milk and other desserts (9).

Health Problems and Probable Cause of Death: Cerebral Hemorrhage. It's predicted that he died because of cerebral hemorrhage. In some sources it's stated that his uncle Mustafa frequently had bleeding of the nose. This situation is considered to be a symptom of hypertension and could be related to his family's medical history. Hypertension is also one of the underneath components of Metabolic Syndrome (8). Obese (2).

FATİH SULTAN MEHMET (1432-1481)

(†, †††††, ††††† - Ω)

Life Time and Monarchy Period: He spent sum of 32 years as a ruler of 49 year life time. He acceded to the throne two times (30+2), (10).

Eating Habits: It's stated in many sources that he liked eating so much and consumed a lot. (4, 8, 9) Especially after his 30's he began to eat so much and preferred meaty foods. It's known that he gained weight excessively, got gout disease and had too much joint pain related to gout (8). On

Mansel P.'s work and Angiello's writings, Fatih is mentioned as a fat man. (10) It's stated that on the portrait which Ressa Gentile Bellini made, apart from Fatih being fat, he got a unhealthy expression on his face (8). Meat, ground game, seafood and desserts (9).

Health Problems and Probable Cause of Death: Gout, swelling on the joints and pain related to this on attack periods. Besides, it is mentioned that there were some compositions on his feet similar to tumor. Aşık Paşazade also stated that there were pieces of liver coming from his stomach while he was dying. Sultan's being overweight is related to diabetes (8). Gout, failure of kidneys and multiple organ failure related to these seem to be his cause of death (8,9). In some other sources, it's mentioned about poisoning as his cause of death (4,8,9,12).

SULTAN 2. BEYAZID (1448-1512)

(††††-Ω)

Life Time and Monarchy Period: He spent sum of 31 years as a ruler of 64 year life time (8).

Eating Habits: Meals that are rich from saturated fat and desserts (12).

Health Problems and Probable Cause of Death: Gout (2, 8).

YAVUZ SULTAN SELİM (1470-1520)

(††††-Ω)

Life Time and Monarchy Period: He spent sum of 8 years as a ruler of 50 year life time (8).

Eating Habits: Likes to much so much (4).

Health Problems and Probable Cause of Death: Anthrax and abscesses on his body. It's stated that he probably died cause of sepsis originated to squeezing the abscesses. Besides this, its' predicted that abscesses could be related to diabetes (4,8).

KANUNİ SULTAN SÜLEYMAN (1494-1566)

(††, †††††-Ω)

Life Time and Monarchy Period: He spent sum of 46 years as a ruler of 76 year life time (8).

Eating Habits: He' well known for his dinner invitations and shooting parties (4).

Health Problems and Probable Cause of Death: He got lesions, swellings and edemas on his feet. He probably got gout too. In collaboration with the lesions on his feet showing gout disease, it's also stated that he got hardening of the arteries and cardiac insufficiency (12).

SULTAN 2. SELİM (1524-1574)

(†, †††††-Ω)

Life Time and Monarchy Period: He spent sum of 8 years as a ruler of 50 year life time (12).

Eating Habits: Meat, alcohol and especially wine (11).

Health Problems and Probable Cause of Death: Due to high level alcohol usage, he's generally drunk. It is speculated that he fell off and died in the Turkish bath because of alcohol (10, 11, 12). Obese and gout (2).

SULTAN 3. MURAT (1546-1595)

(†-Ω)

Life Time and Monarchy Period: He spent sum of 21 years as a ruler of 49 year life time (12).

Eating Habits: He's very fond of meat and meaty foods (13).

Health Problems and Probable Cause of Death: Liver illness, epilepsy attacks, cramps in stomach. Meningitis and liver illness (8). Obese (2).

SULTAN 3. MEMET (1566-1603)

(†, ††, ††††-Ω)

Life Time and Monarchy Period: He spent sum of 8 years as a ruler of 37 year life time (11, 13, and 14).

Eating Habits: He's very fond of eating, especially meat, milk and fatty foods (4).

Health Problems and Probable Cause of Death: His syncope and deliriums in parallel with his obesity make think of diabetic coma. Heart attack, Obese.

SULTAN 1. AHMET (1589-1617)

(†- Ω)

Life Time and Monarchy Period: He spent sum of 14 years as a ruler of 28 year life time (4).

Eating Habits: He's fond of eating but he doesn't use alcohol (9).

Health Problems and Probable Cause of Death: Typhoid, Intestinal Infection, High Fever, Abdominal Pain. Obesity (15).

SULTAN 1. MUSTAFA (1592-1639)

(†- Ω)

Life Time and Monarchy Period: He spent sum of 2 years as a ruler of 47 year life time (8).

Eating Habits: He's fond of eating (9).

Health Problems and Probable Cause of Death: He's presumed to have psychological disorders. His cause of death is unknown (10). Obesity (2).

SULTAN 2. OSMAN (1601-1622)

(†- Ω)

Life Time and Monarchy Period: He spent sum of 4 years as a ruler of 21 year life time (4).

Eating Habits: It's presumed that general eating habits of Ottoman Empire are valid for him too (11).

Health Problems and Probable Cause of Death: He was killed during a rebellion (8). Obese (2).

SULTAN 4. MURAT (1612-1640)

(††- Ω)

Life Time and Monarchy Period: He spent sum of 17 years as a ruler of 28 year life time (10).

Eating Habits: He's fond of wine (4,9).

Health Problems and Probable Cause of Death: Alcoholic. Cirrhosis and failure of

liver, heart and brain due to alcohol usage (9).

SULTAN 1. İBRAHİM (1616-1648)

Life Time and Monarchy Period: He spent sum of 8 years as a ruler of 32 year life time (9).

Eating Habits: He's well known for his fondness for eating and harem (8).

Health Problems and Probable Cause of Death: He had lived most of his life in a cage and because of this life in a cage, it's mentioned that he got some psychological problems and fears. He was not so intellectually improved and believed in everyone quickly. He was killed in a cage (8).

SULTAN 4. MEMET (1642-1693)

(†, ††, †††††- Ω)

Life Time and Monarchy Period: He spent sum of 39 years as a ruler of 51 year life time (4).

Eating Habits: He is very fond of eating in general but he especially likes to hunt and use ground game meat (9).

Health Problems and Probable Cause of Death: Gout disease and dementia. He lived last five years of his life in cage. He was killed in a rebellion (8). Obese and got coroner problems (2).

SULTAN 2. SÜLEYMAN (1642-1691)

(†, ††- Ω)

Life Time and Monarchy Period: He spent sum of 4 years as a ruler of 49 year life time (4).

Eating Habits: He liked every kind of food. So overweight (9).

Health Problems and Probable Cause of Death: He lived 40 of 49 years life time in cage. Cage life could be compared to today's jail life. Its different part is that intended foods could be served at intended times. It's mentioned that most of the people who lived long term cage life were nearly all so fatty and had some psychological issues (3). It is also mentioned that Sultan 2.Suleyman was skeptical, mentally

retarded and was living in fear of the death (14).

SULTAN 2. AHMET (1643-1695)

(†, ††, †††††- Ω)

Life Time and Monarchy Period: He spent sum of 4 years as a ruler of 52 year life time (8).

Eating Habits: He liked every kind of food. So overweight (4).

Health Problems and Probable Cause of Death: lived 43 of 49 years life time in cage. His life story shows too many similarities with Sultan 2.Süleyman. It's mentioned that in a similar way he was skeptical, fearful, got mental deficiency and at the same time it's said that some kind of paralysis occurred and he got edemas. His probable death cause is mentioned as heart attack or vascular brain disease (13). Gout patient (2).

SULTAN 2. MUSTAFA (1664-1703)

(†, ††- Ω)

Life Time and Monarchy Period: He spent sum of 8 years as a ruler of 39 year life time (8).

Eating Habits: He is very fond of eating (9).

Health Problems and Probable Cause of Death: He lived 7 years of his life in the cage. It's told that compared to the other sultans he lived a more comfortable cage life (13). It's mentioned that he had edemas frequently as an health issue. It appears in Freely's work that he had heart illness. It is also stated in the same that was dethroned during the rebellion in Edirne and was so depressed after that. His probable death cause appears to be cardiac insufficiency and edema (13). Obese (2).

SULTAN 3. AHMET (1673-1736)

(†, ††, †††- Ω)

Life Time and Monarchy Period: He spent sum of 27 years as a ruler of 63 year life time (8).

Eating Habits: He is known as he was very fond of banquets and drinking. The term he lived in coincides with the "Tulip Period" of Ottoman Empire. This period is known as the eating, drinking and various amusements are on their most popular time in Ottoman Empire (4, 9).

Health Problems and Probable Cause of Death: Living his last 6 years in a cage caused him to have a deep depression and gain weight. Besides it's known that he got diabetes and heart disease (8). His probable death cause is stated as cardiac insufficiency.

SULTAN 1. MAHMUT (1686-1754)

(†, †††- Ω)

Life Time and Monarchy Period: He spent sum of 24 years as a ruler of 68 year life time (9).

Eating Habits: He's very fond of eating especially meaty food (4).

Health Problems and Probable Cause of Death: It's stated that he was so overweight due to being very fond of eating. It is also mentioned that he had Kyphosis. His probable cause of death is known as fistula due to bone tuberculosis (16).

SULTAN 3. OSMAN (1699-1757)

(†, ††, †††- Ω)

Life Time and Monarchy Period: He spent sum of 3 years as a ruler of 58 year life time (9).

Eating Habits: He's known as being so fond of eating. In some sources it is also mentioned that he went to bazaar 3 days a week and ate everything he saw like kebab, custard, pancake and was very overweight (17).

Health Problems and Probable Cause of Death: He got Kyphosis and was so overweight (8). According to Freely, he died because of cardiac inefficiency (11), and according to De Lamartine because of removal of some kind of tumor called worm tumor from his body (17).

SULTAN 3. MUSTAFA (1717-1774)

(†, ††- Ω)

Life Time and Monarchy Period: He spent sum of 17 years as a ruler of 57 year life time (8).

Eating Habits: Meat, milk and fatty foods (9).

Health Problems and Probable Cause of Death: Overweight (8). It's stated that his death was due cardiac inefficiency (17).

SULTAN 1. ABDÜLHAMİT (1725-1789)

(†, †††- Ω)

Life Time and Monarchy Period: He spent sum of 14 years as a ruler of 64 year life time (4).

Eating Habits: It's stated that he was very fond of eating, drinking and enjoyment. The term he lived coincides with the downfall of Ottoman Empire (8).

Health Problems and Probable Cause of Death: He spent 43 years of his life in the cage (8). He got stroke due to depression and died (4). Obese and hypertensive (2).

SULTAN 3. SELİM (1761-1808)

(†- Ω)

Life Time and Monarchy Period: He spent sum of 18 years as a ruler of 47 year life time (9).

Eating Habits: It's stated that he was very fond of eating and organizing banquets and parties with the last money from the treasure of Ottoman Empire (8).

Health Problems and Probable Cause of Death: He spent 15 year of his life in the cage (8). He was murdered (4).

SULTAN 2. MAHMUT (1785-1839)

(†- Ω)

Life Time and Monarchy Period: He spent sum of 31 years as a ruler of 54 year life time (4).

Eating Habits: He used to drink so much alcohol. Alcoholic (8).

Health Problems and Probable Cause of Death: Tuberculosis and cirrhosis due to

alcohol. Palmer and Mansel state that Sultan 2. Mahmut died because of fatal alcohol addiction ending with a "Delirium Tremens" seizure (15, 18). Delirium is also one of the symptoms of cirrhosis. Hepatic insufficiency is mentioned as his cause of death too (8).

SULTAN ABDÜLMECİT (1823-1861)

Life Time and Monarchy Period: He spent sum of 22 years as a ruler of 38 year life time (8).

Eating Habits: He was very fond of eating and harem life but he didn't use alcohol (8).

Health Problems and Probable Cause of Death: He's known as Tuberculous. It stated that he died because of pneumonia (8).

SULTAN ABDÜLAZİZ (1830-1876)

Life Time and Monarchy Period: He spent sum of 15 years as a ruler of 46 year life time (4).

Eating Habits: Meat, cream (8).

Health Problems and Probable Cause of Death: In some sources it's stated that he was killed and it was a controversial death (8).

SULTAN 5. MURAT (1840-1904)

(†, ††††- Ω)

Life Time and Monarchy Period: He spent sum of 15 years as a ruler of 46 year life time (8).

Eating Habits: He is known as alcoholic, addicted to morphine and fond of wine and champagne (8).

Health Problems and Probable Cause of Death: He was mentally sick, chronic alcoholic and diabetic (8,9). Death due to excessive usage of alcohol (8), obese (2).

SULTAN 2. ABDÜLHAMİT (1842-1918)

(††- Ω)

Life Time and Monarchy Period: He spent only 33 years as a ruler of his 80 year life time (9).

Eating Habits: He is known as he was fond of coffee and tobacco usage (8).

Health Problems and Probable Cause of Death: Tuberculosis (4, 8). High fever due to tuberculosis (9). He had some coronary problems (2).

5. SULTAN MEHMET REŞAT (1844-1918)

(†, ††, ††††††- Ω)

Life Time and Monarchy Period: He spent only 9 years as a ruler of his 74 year life time (8).

Eating Habits: He was very fond of using alcohol (8).

Health Problems and Probable Cause of Death: He was so overweight and he also got sleep apnea (4). Dead due to heart condition (9).

SULTAN VAHİDETTİN (1861-1926)

(††, †††- Ω)

Life Time and Monarchy Period: He spent only 4 years as a ruler of his 65 year life time (9).

Eating Habits: He used to use excessive tobacco (8).

Health Problems and Probable Cause of Death: Cardiovascular disease. Failure of lungs and aorta due to heart attack (9).

CONCLUSION:

Metabolic syndrome is defined as a disease of postmodern period which occurs as a consequence of sedentary lifestyle and excessive amount of nutrition due to nowadays conditions. In this work, nutrition habits and health conditions of sultans of Ottoman Empire (which existed between 258-1926) are compared. Comparison proved that metabolic syndrome that seems like modern period's disease has existed in the palace life which characterizes with especially sedentary life style and excessive nutrition. The existence of abdominal obesity can be observed through painted portraits and written sources about 25 of 36

sultans who acceded to Ottoman Empire throne. This situation shows us that %69.4 of sultans (25) had carried at least one of the ACE-AAC criterions (abdominal obesity) which is used for diagnose of metabolic syndrome. %38.8 of sultans (14) carries at least two of the metabolic syndrome ACE-AAC criterions.

At least two of the ACE-AAC criterions should be carried for diagnose of metabolic syndrome at individuals. The frequency of diagnose for metabolic syndrome in our country is stated as around %33 (2). It's observed that eating habits had been effected from the magnificence and splendor of palace life during the years that Ottoman Empire dominates. It seems that some of the sultans had lived long years of cage life. It's especially observed that sultans who had to live their lives in the cage tend to have an excessive nutrition habit and become so overweight because of the intake calories of meals which are unburned due to inactivity.

Although it is presumed that sultans who were leading to campaigns are grown up more athletic and had expended more effort, more than half of the sultans were still carrying the criterions of metabolic syndrome. The reason of this is eating up meals that consists high saturated fats, rich from calorie and protein during their palace life.

It is observed that the factors which are valid for occurring metabolic syndrome nowadays were valid in the past and they were giving similar results. The importance of life style for preventing from metabolic syndrome propounds that nutrition habits have to be modified as well as physical activity should be increased.

REFERENCES

1. Arslan M. Metabolic Syndrome Diagnosis, Pathogenesis, Diagnostic

- Criteria and Components, *Turkiye Klinikleri, J Int Med Sci*, 2006;2(3):1-7
2. Dağdelen S, Erbaş T, Disease of the Sultans: metabolic syndrome in Ottoman dynasty, *Anadolu Kardiyol Derg*, 2010; 10: 270-3.
 3. Salas R, Bibiloni M, Ramos E, Villarreal J, Pons A, Tur J, Sureda A. Metabolic Syndrome Prevalence among Northern Mexican Adult Population. *PLoS One*. 2014; 9(8): e105581. Published online Aug 20, 2014. doi: 10.1371/journal.pone.0105581.
 4. Uzunçarşılı İH. Osmanlı Tarihi, 1.Cilt, 2.Baskı, TTK Basımevi, Ankara, 1961, 452- 493s.
 5. Kazancıgil A. Osmanlılarda Bilim ve Teknoloji, Etkileşim Yayınları, 1. Baskı, İstanbul, 2007, 345s.
 6. İhsanoğlu E. Osmanlılar ve Bilim, Kaynaklar Işığında bir Keşif, Etkileşim Yayınları, 2. Baskı, 2007, 272s.
 7. Arif Bilgin, Seçkin mekanda seçkin damaklar; Osmanlı Sarayında Beslenme Alışkanlıkları, Geçmişten Günümüze Yemek Kültürümüz, (Hzr: Sabri Koz), İstanbul, 2013, s.78-118.
 8. Barış Y İzzettin.. Osmanlı Padişahlarının Yasamlarından Kesitler, Hastalıkları ve Ölüm Sebepleri. Bilimsel Tıp Yayınevi, 1. Baskı, Ankara, 2002, 291s.
 9. Kinross L.. The Ottoman Centuries the Rise and Fall of the Turkish Empire. Morrow Quill Paperbacks, NY, 1977, 61-79s.
 10. Mansel P. Constantinople. Penguin Books, London, 1997, 1-26s.
 11. Freely J. Osmanlı Sarayı Birhanedanlığın Öyküsü. Remzi Kitabevi, 2. Baskı, İstanbul, 2000, 175-192s.
 12. Wheatcroft A. The Ottomans Dissolving Images, Penguin Group(USA) Incorporated, English,1994, 352.
 13. Goodwin J. Lords of the Horizons. A History of Ottoman Empire. NewYork, John Macreal Owl Books, 2000, 172s.
 14. De Lamartina A. Osmanlı Tarihi. Toker Yayınları, 2. Baskı, İstanbul, 1995, 795s.
 15. Mansel P. Constantinople. City of the World Desire 1453-1924. Penguin Books, London, 1997, 240-260.
 16. Ceyhun D. Ah Şu Osmanlılar. Sis Çanı Yayıncılık, İstanbul, 2000, 32.
 17. De Lamartine A. Osmanlı Tarihi. Sabah Yayınları, İstanbul, 1995, 854-890.
 18. Palmer A. Osmanlı İmparatorluğu Son Üçyüzyıl. Çev: Belkıs Çorakçı Dişbudak. Sabah Kitaplar Ekonomik Yayınlar A.Ş, 5. Baskı. İstanbul, 1995, 125-166s.

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