e-ISSN: 2279-0837, p-ISSN: 2279-0845.

www.iosrjournals.org

# The Contributions of Waqfs and Urban Development to the Settlement of Public Health Services: An Overview to Turkish Administrative History of Anatolian Seljuks

### Ahmet Keser<sup>1</sup>, Engin Kurt

<sup>1</sup>(Department of Political Science and International relations, Hasan Kalyoncu University, Gaziantep, Turkey)

**Abstract :** During the period of Anatolian Seljuks, a great importance was given to the urban development as the economic, political or military centers with a synthesis of Islamic, Turkish, Byzantine and Persian cultures. Special care was taken of the introduction of public services, especially the health services that have never been neglected. Seljuks have considered medicine of utmost importance and have contributed significantly to civilization. During the Seljuk period, a lot of pioneering madrasahs has been founded as a continuum of the Islamic history with significant contributions also affecting the Ottoman culture as a successor. It is evaluated that, as in the case of all public services of the period, the organization and introduction of the health services had also close relation with the urban development and waqf institutions (foundations). Hence in this study it is aimed to investigate the structuring related to the introduction of the health services during the aforesaid period within the scope of waqfs and urban development by a research process through original archive documents.

**Keywords -** Administrative History of the Anatolian Seljuks, Health Services, Public Services during Anatolian Seljuks, Urbanization, Waqf and Darul-shifa.

#### I. INTRODUCTION

The efforts related to the organization and conduct of the health services as a sub component of public services are being studied separately by different scientific disciplines. Each discipline naturally handles the subject within the frame of their own perspective and this phenomenon causes scattered literature related to the topic. The academic researches related to the organizational structure of health services in Turkish Administrative History also present a similar path. For example Çavdar and Karcı [1] denote that "it has turned out to be a tradition to link the researches on the Ottoman Medicine to one of the four main approaches" and according to the authors [1] the most common approach is to see the Ottoman Medical History as a sub branch of history of the medicine and technology. They claim that the second approach evaluates it as part of the history of thought, while the third approach concentrates on the education of doctors and handles the matter as a branch of the Ottoman Administrative History. The last approach treats it as a sub branch of medical biography by studying the works of famous doctors.

Setting out from this assessment concerning the Ottoman period, it is possible to extend the inference in question to include the Seljuk period as well. The phenomenon of handling the topic by various disciplines does not arise from the undetermined position of the subject among disciplines. Conversely it derives from the situation of falling within the interest area of more than one scientific discipline due to the nature of health services. Because different functions of health services as the organizational structure, administration, training of personnel and service delivery stand within the interest areas of various disciplines. Starting from this stand point, this study aims to research the organizational development of the health services during the period of Anatolian Seljuks with an interdisciplinary approach within the frame of the waqfs and the urban development of the period by the contributions of two authors: one from Public Administration discipline and other from the area of History of Medicine.

Initially, we assess that the administration system of Anatolian Seljuks, who ruled the Asia Minor and the surrounding areas for about three centuries (1038-1326), has to be the main starting

point. Related to Anatolian Seljuks, Özcan [2] points out that the administrative system of the period has been organized on the "Byzantine-Seljuk" dual political structure in terms of politics, "nomadsettled" dual life style in terms of socio-cultural structure, "international trade potential and performance" in terms of economics, and with a constitution of "tribal confederation" in terms of administration. Consequently, the constitutions of the government and administrative structures have affected the organization of the public services as well. Kejanlı [3] and Cerasi [4] state that during the period of Anatolian Seljuks (1071-1299) a synthesis was emerged composed of Turkish-Arabic-Iranian-Anatolian-Byzantine cultures. The authors also exert that new extensions were brought to the residential and cultural concurrence of Anatolia with the construction of many solid and wellgroomed roads, stone bridges, karwanserais (hotels with a large open central area, used in the past in Eastern countries by groups of people and animals travelling together), aqueducts (viaducts carrying a waterway over a valley), mosques, madrasahs (Islamic theological seminary and law school and/or universities of the time attached to a mosque), observatories, libraries, hammams (Turkish bath), kümbets (a kind of cupola) and palaces. Seljuks brought great changes in nearly every phase of life. Hence, as denoted by Özcan [5] the Anatolian Seljuk period can also be defined as the early Turkish settlement or colonization process in which the spatial infrastructure of the Anatolian-Turkish urban culture was organized. They built cities like Konya, Nishapore, and Sheraz, and developed the infrastructure to facilitate the movement of goods and services within the country.

During this process in which the Anatolian cities were reconfigured as a synthesis, the "waqf" institution had a special and significant role in the submission of public services in general, and health services in particular. Starting from this justification, the structure of the submission of the Anatolian Seljuks' health services within the frame of the impacts of waqf institutions and urban functions are investigated by applying at first a descriptive methodology through the current academic literature, and later, by consulting the original charters of the waqfs at the Turkish archives.

## II. THE RELATION AMONG WAQFS – URBAN ORGANIZATION SUBMISSION OF HEALTH SERVICES AT ANATOLIAN SELJUKS

It is commonly known that newly established Anatolian cities were ornamented with "madrasahs" giving education on law, medicine, mathematics, astronomy, philosophy and literature and with "Darul-shifas (hospitals of the time)" as the public service organizations on health and education by means of waqf institution during the period of Turk-Islam settlement [5]. In the Turkish Administrative History, this tradition of executing the public services mostly via waqfs has continued until the Nineteenth Century. This was not an unusual administrative application during that time because some other countries of the time had similar systems as well in the execution of the health services. For example, according to Çavdar and Karcı [1] it is known that the health services were carried out by the activities of the churches in Europe until they were organized as a sub branch of public administration by the governments in the Nineteenth Century.

It is obvious that the organization of health services as a component of public services is correlated with the evolution of the cities where the people who needs these services and the medical personnel who execute them live together. It is also known that one of the common matters of humanity has been the health issue since the ancient times [6]. If the evolution of the health service is investigated, it can be seen that there is a wide range of variety. Yavuz [7] remarks that "the type and development of the services are determined by many factors as the demands of the individuals, institutionalization, culture and the economical characteristics, and differs from one society to another". Within this context, treating the establishment of madrasahs and Darul-shifas as a mission of the state and training doctors at these institutions exhibit the importance given to health and training services which were provided as a public service by Anatolian Seljuks [8]. After embracing Islam, the rulers became very conscious about the public welfare of the country. Islam stresses on sharing wealth and spending on charities. This spiritual concept gave birth to various types of "Waqf" (Trust) institutions and organizations as "Darul-shifas" (hospitals). Throughout the Muslim World, the Ruling Dynasties and wealthy people used to establish wagfs to earn "sawab-e-jaria" (continuous blessings) by providing humanitarian services to the needy people. They used to donate a portion of their wealth to make it a sacred trust to establish, run, and maintain the institutions like hospitals, schools, langer (free food) etc.

Consequently, it is essential to state here that the organization and administration of these services were conducted by means of waqfs established usually by sultans, their wives, "vezirs (viziers/ministers)" and/or wealthy tradesmen of the time; and this practice has continued for ages in the Turkish Administrative Tradition. When the Turkish Administrative History is investigated, it is seen that the tradition and policies related to the execution of the mission and responsibilities on health services directly by the government and/or state itself have started from the second half of the Nineteenth Century [6]. So, during the period of Anatolian Seljuks the health services and training were conducted within the frame of waqf system developed by means of spatial organization of the cities. This tradition was taken over by the administrative system of the Ottoman Empire as well, and the health institutions have served as a continuum of the Seljuk period both in appearance and execution until the Nineteenth Century [1]. Similar to this function of the wagfs, the constitutions of the cities and urbanization have also directly affected the development of the health services, education and training of medical personnel, and organization of the institutions. This impact has continued during the period in which the health services provided were considered directly as a function of the public administration to be conducted by the governments as well. Yavuz's assessment as "providing health service has been affected substantially from urbanization, industrialization and from large numbers of population movements in the years 1850–1920, within which the industry revolution has been realized" [7] also supports this justification.

From this point of view when both the Seljuk and Ottoman periods were investigated, it appears clearly that there is a close relation between the waqf institution and the spatial structures in the cities, hence between the establishment and administration of madrasahs and health institutions of the time which are among these structures. Related to Ottoman period, Bayartan [9] states that there were spatial structures each of which could be evaluated within a separate functional group at the basis of the urban system and most of these spatial structures were established by the waqf system and achieved their sustainability within this waqf system. So if we start from the point that Ottoman Empire has taken over the waqf system from the administrative tradition of Seljuks and generalized it through their administration, it is possible to make the same assessment for the Anatolian Seljuks as well. Thus, the judgment of Yediyıldız as "Waqf is a religious, judicial and social institution, which has played an important role in the Islamic World at the social, cultural and economic life on the lands conquered from other states, during the time of Seljuks and Ottomans from the midst of the Eighth Century to Nineteenth Century" [10] also supports this assessment.

After making the above assessments, we will try to examine the relations among the rings of the following chain in sequence: (a) The role of "Waqf" institution during the period of Anatolian Seljuks in the execution of health service as part of public services; (b) The relation between "Urban development – Waqf institution – Execution of the Public services in general and health service in particular" within the considered period.

The term "Waqf", which is used to define a special type of foundation as an institution today, has three different equivalents at the Islamic Law, which are as "Vakıf", "Habs or Hums" and "Sadaka". When the word is etymologically investigated, it is found out that it is transferred from Arabic to Turkish and as an infinitive it is produced from the (va-ka-fe) root in Arabic and has a meaning of "to stop – to lock in – to detain/intercept" [11]. Waqf, which is an element of Turkish-Islamic culture system, is defined by Yediyıldız [12] as the act of a person, who is belonging to this culture and society, arises by the donation of a portion of his/her private goods to some institutions which will conduct public services.

As a general feature, the common characteristic of different waqf definitions is indicated as "the allocation of a property to public services" by Ertem [13] and since the waqf serves for the public benefit firstly, aims to satisfy the public needs secondly, and the beneficiaries of these waqf services consist of people finally, it is denoted that these characteristics bring a social context to waqf institution. In addition to this assessment, Çatakoğlu's following consideration also calls attention both to the social role of the waqfs and to the close relation between the public services, waqf institution and spatial development of the cities as "Waqf institution has played an important role at the Islamic Community by taking over the execution of municipal and social services with regard to the requirements in the organization of villages, towns and cities" [14]. Parallel to this statement, Berki's assessment evaluating waqfs as the institutions assuring the cooperation of the people with the

government and providing the effective and continuous participation of citizens to the execution of public services, in the countries especially which doesn't have sufficient financial capacity to run the public services as required [15], clearly points out this close relation as well.

By the way, it is a necessity to indicate that the encouragement and constitution as a social and political organization, the "Waqf Institution" is not a new phenomenon and it is not exclusively peculiar to Turkish or Islamic States [16]. It is also useful to state that, waqf institutions established extensively in various countries does not have completely same characteristics and/or functions. According to Reuter the main difference of the foundations established in the European countries from those of Islamic countries, stems from the judicial principals they are based on [16].

The institutions, which had the utmost role in the constitution of the madrasahs, which meant "lecture houses" [17] as the important education and culture centres of the time, were the waqfs as well and "madrasahs have carried out the essence of being waqf organizations from their beginning" [18]. Related to this issue, Çatakoğlu makes an assessment that the madrasahs constituted during the period of Great Seljuk Empire were taken as the models for those established by Anatolian Seljuks [14] as well. During their time they spread all over the country and to all the cities from each scale as the formal institutions of Education [18, 19].

After referring to this close relation between the waqfs and madrasahs, it is also considered to be useful to mention briefly the judicial development of the waqf institution. Looking back from the period of Seljuks to other Islamic civilizations, it is seen that the waqf institution has completed its judicial development at the second half of the Third Century of the calendar of the Hegira (The calendar of the Hegira takes the year 622 AD as a beginning). Waqfs and their institutionalization have expanded widely by Turks, and during the period of Seljuks and Ottomans, most of the public services were executed directly or indirectly [13] through these institutions.

When the situation in other countries is investigated, it is seen that there was a parallel structure between the establishment of foundations and the execution of health services via these institutions almost at the same period (12th-13th Centuries), even if there were significant differences in their judicial status and functional missions. Therefore, the process of establishing and administrating the health organizations as an important sub-branch of public services via waqfs in accordance with the Turkish-Islamic Administrative tradition during the time of Anatolian Seljuks is consistent with the spirit of the time as well. Although, having different types of foundations established in other countries as well, the brightest and unique examples of the waqf institutions were established and institutionalized by Turks as stated by Kunter [20].

The waqf system, which has come from the Turkish-Islamic Administrative Tradition and institutionalized by Seljuks, has continued with contributions during the time of Ottomans also. As mentioned by Akgündüz, education and training services, municipal services, social assistance and solidarity and many types of other public services were executed uninterruptedly by these institutions starting from Seljuks until the declaration of Tanzimat [21] (Series of reforms undertaken in the Ottoman Empire to modernize society, to secularize the government's treatment of people and property) in 1839. The main reason lying behind this long lasting tradition can be evaluated as the principles established during the time of Seljuks. To ensure the running of the waqfs more efficiently, a Ministry for Waqfs (Evkaf Nezareti) was found during the time of İzzettin Keykavus the 1st [22]. The activities of this Ministry contributed positively to the institutionalization of the waqfs. By the way, to clarify the roles of the waqfs during the period of Anatolian Seljuks, in conducting public services and in the execution of health services, it is assessed useful to explain all the components, which compose the waqf institution. By using Ertem's taxonomy [13], we can arrange the three basic components of waqf as: (a) "Vakıf" (Benefactors, the person/s as the founders and donors of the waqf), (b) "Mevkuf/Mawquf" (Grant, donation, everything granted to a waqf), and (c) "Mevkufunaleyh or Meşrutun leh" (Beneficiaries and/or the person/s to whom the benefits of the waqf are allocated). This taxonomy exhibits the importance given to human beings and to human needs since two of the three components are related to person/s. While explaining the emergence of the "waqf institution" setting forth from the general sociological tendencies, the expression used by Güngör as: "Humans go into action to satisfy their needs firstly, these actions are repeated in time, repeated actions turn into habits, habits become customs in time. Customs are made into rules and become norms and finally norms turn into institutions" [11] clearly puts forward the importance of the

human factor and humanitarian needs in the existence of these institutions. Another scholar attracting notice to the fact that two of the three components of waqf are composed of the human factor is Ertem, who indicates the relation between the person/s (benefactors and beneficiaries) and grants/mawquf with his assessment as "Both the benefactor/s (Vakıf) and the beneficiary/ies (Mesrutun leh) are composed of individuals or community. The relation between them is ensured by the grants and/or donations (Mevkuf)" [13]. The interaction among the person, waqf and the spatial development of the cities arise exactly at this point. Because cities constitute the meeting points of both the benefactors and the beneficiaries as the places in which the people live, and all the grants and donations as the premises, farms, estates and buildings form the important components of the urban texture. Thus, when the urban structure constituted by Turks in Anatolia is investigated within the historical context, it is seen that the result is a synthesis of civilizations. Kejanlı also indicates this synthesis phenomenon while he is stressing both on the heritage taken over from the previous cultures and the contributions made by the new ones by assessing that the Anatolian cities which have an ancient nucleus were converted into a new structure during Turkish-Islamic period, resulting with the construction of a mosque, a rest house (han), a hammam, and close to them a madrasah at the downtown or city centre taken over from the previous civilizations [3]. This assessment also indicates the parallelism between the development of the nucleus of the urban structure and the madrasahs as the universities of the time, in which the medical doctors to be served at the health services were educated. The assessment put forward by Özcan and Yenen as "The spatial fiction of the Seljuk cities is organized in company with the Turkish-Islamic and monumental-public service premises, composed of mosque-madrasah compositions configured by waqf institutions, which are financed by Seljuk Sultans, their ministers or wives" [23] also set light to the socio-cultural relation among the elements of the chain, made of human-city/urban-waqf-public services-madrasah-health services.

In this context, when the Anatolian Seljuk period is investigated, it is seen that there were 30 madrasahs in Konya, which was the political-administrative capital of the state; 13 madrasahs in Sivas, which was the international trade centre of the time; and 9 madrasahs in Kayseri, which was the second political-administrative centre. This situation shows that there was a gradual sequence (echelonment) of service, based on socio-cultural configurations [24]. A health services system, which is considerably developed according to the circumstances of the time and run by the waqfs [7], had also a significant place within this service based echelonment.

Setting out from the aforementioned justification on the presence of a service echelonment within the scope of the spatial development of the cities, it is evaluated that the relation can be investigated in terms of the urban functions among the rings (urban/city formation and development waqf institution – the execution of public services in general and health services in particular) of the chain, mentioned previously as the 2nd question of the study to be answered. Urban functions vary according to the size, location and the importance of the cities [25]. In this context, by imposing Süha Güney's taxonomy of urban functions [26], Bayartan investigates the wagfs of the Ottoman period by separating into three sections: "(a) Waqfs and economical services, (b) Waqfs and socio-cultural services, and (c) Waqfs and administrative-political services" [9]. This functional taxonomy, which is used when the relation between the wagfs and urban functions are investigated, exhibits a parallel approach to those of Özcan's [2], used in the investigation of the Seljuk Urban System of the Anatolia in the 12th-13th Centuries. Özcan's taxonomy is composed of "(a) Defence System: Military Organization and Structures (b) Production Systems: The Policies of Economics and The Agricultural and Industrial Activities, (c) Distribution Systems: The Network of Karwanserais and the Bridges, (d) Administrative System: The Types of Administrative Organizations and Administration" [2]. If we merge the strongly linked systems of this taxonomy as the following: defence system-administrative system and production system-distribution system, it is possible to see that the most significant difference between two taxonomies is Özcan's preference of investigating socio-cultural services in a covered way within other components instead of taking it directly as a component.

It is evaluated that this three step categorization related to urban functions provides a useful theoretical frame also in the analysis of the development of the health services during the period of Anatolian Seljuks. Because the components assessed to be effective on the administration of the health services, which is a special type of public services, also exhibit parallelism. Indeed, both the execution type of the health services and the scientific-technologic level in this area is in a continuous

state of change and development progressing in every era. As being distinctive elements, the level and relations of production (social dynamic) have also come into prominence together with the development in Science and know-how (scientific dynamic) [7].

When Bayartan's study is investigated within the frame of the execution of health services alone, it is seen that the services as: "the constitution of wagf hospitals, the execution of medical treatment at these hospitals and providing medicine for the poor people free of charge" [9] were evaluated within the economical services provided by waqfs and "decreased the imbalance of income distribution to a minimum" [9] together with all other public services falling within the group of economical services. On the other hand, the following services were covered within the frame of socio-cultural services provided by waqfs as: "...madrasahs...which were the institutions of higher education,... the constitution of 'dar'ül-kurra and darü'l-hadis" [9] (The parts of madrasahs at the medieval Islamic countries in which the methods of reading Quran and Hadiths - Prophet Muhammad's sayings/deeds - were taught), "...satisfaction of the vital needs in the conditions of emergency like flood, fire, earthquake, pandemic, poverty, and ...satisfying the needs of incapable people and their medical treatment..." [9]. Finally, the public services as "the health services for the Army, services for education..." were evaluated as the administrative-political services provided by Waqfs. It is obvious that most of these public services are directly related to at least a few of the urban functions simultaneously. Thus, other than the above mentioned functional taxonomy, the author himself also uses an additional categorization as "(a) Field of economics, (b) Field of education, (c) Field of religion, (d) Health services and social field, (e) Field of sports, (f) Civilian and Military Field" [9]. Within this second categorization, the author covers those organizations as "schools, madrasahs, and libraries" [9] and the services provided at these institutions, which are indirectly related to the health services field as well, within the field of Education. On the other hand, he naturally evaluates "hospitals" within the services of health and social field. In our opinion, the health service organizations, which also constitute one of the main axis of this study as well, are primarily closely linked with the administrative-political services field because they were closely related to the administration of the education and the madrasahs, which were the high education institutions of the time, in which generally the medical doctors were trained as well. Secondly, they are connected with the field of economics since the medical treatment of the poor and their needs of medicine were provided free of charge and by this way it was tried to prevent the imbalance of the income distribution. Last but not least, health service is also a kind of public service linked with the sociocultural field, because of its contributions to the abolishment of the inequality between the social layers of the people. From this aspect, it is clear that the execution of health services as a branch of Public services is closely related to all three of the urban functions. Thus, primarily the spatial development of the cities, which were the natural centre of attraction as the habitat of all people from the wealthy or poor portion and secondly the constitution of waqf institution in these urban areas by the contributions of well-endowed people, had an important impact on the execution of the health services during the period of Anatolian Seljuks. On the other side, the health organizations of the time made significant contributions to the development of the cities where they were established. Because as clearly stated by Özcan, madrasahs and health organizations of the time have undertaken the mission of residential focus and centres of attraction to encourage the Turk-Islam enlargement and settlement in addition to their urban and socio-cultural services functions [5]. In other words, there is a bilateral impact. The constitution and development of the cities revealed the need for the establishment of the health organizations due to the concentrating population movements, and the establishment of the health organizations in the cities transformed those cities as the centres of attraction and triggered the flow of more people to these urban areas and caused the enlargement of them. Within the urban development process of the period, the financial source of all these services requirements were satisfied by the institution of Waqfs, as is the case of many other types of public services.

After introducing this multilateral interaction among the development of the Anatolian urban structure during Seljuks, the institution of the waqfs, and the execution of the health services, it is assessed to be useful to investigate the health organizations and education institutions related to this service field established by Turks during their enlargement continuum. Within this process, Turks deploying from the steps of Mid-Asia to the West have constituted many health organizations in

addition to the institutions of education for centuries, while governing large numbers of communities in the places they were settled in Asia, Europe and Africa [27].

Herein, as stated above as well, a kind of chicken and egg type bilateral interaction was emerged between the spatial development of the cities and the establishment of the health organizations; those were considerably developed at their age. Related to the Anatolian Seljuks' urban structure, Özcan's assessment based on three basic veins of urban spine carries out a very explanatory essence in terms of the elements shaping the urban structure of the period as: (a) the donjon of the castle or citadel as the administrative centre, (b) the social and cultural centre of the city, (c) the economy centre of the city (bazaar area) and the appended compositions of "mosque—madrasah—hammam (Turkish bath)" or "mosque—dârü'ş şifâ/darul-shifa/darüşşifa (hospitals and faculty of medicine at that time)" to this main structure as the secondary development focus, which were the early examples of "Külliye" (complex of buildings adjacent to a mosque)" [5].

The Medieval is normally a standstill period for the Western World, while it was a rising age for the East. In this period, the Turkish tribes have improved the living standards of the urban areas within the spatial structure explained above, with the construction of mosques, madrasahs, roads, bridges and "karwanserais" in addition to "hammams (Turkish bath) and Darul-shifas (hospitals)" symbolizing their civilization in the Front Asia region including Egypt [27, 28, 29]. Among these the darüssifas, defined as the health organizations or dormitories of the era [30], were the organizations functionally equal to the hospitals and medical faculties of today. They were known also with the names as "şifahane, maristan, bimaristan, darü's-sıha, darü'l-afiye, ma'menü'l-istihare, darü't-tıp" in Anatolia [31, 32, 33]. During the period of Seljuks, the health organizations were generally named as "şifahane (healing/cure house)" or "maristan (health house)". Etymologically, the word maristan is a Persian word meaning place of health, while bimar means unhealthy/sick. Over time the word bimaristan is used to meet the meaning of hospital [34]. All these organizations established to satisfy the health requirements of the society could survive by the contributions of waqfs [35] as indicated earlier also. Within the frame of this research, the aspects related to the subject were investigated under the following headings through the charters of waqfs as the first hand resources from the time of Seljuks.

## III. THE INVESTIGATION OF THE HEALTH SERVICES DURING THE PERIOD OF SELJUKS THROUGH CHARTERS OF WAQFS

Within the frame of this research the first archive document investigated is the "Charter of Waqf, dated 506 (of the Hegira)/1113 (A.D.), belonging to Sultan Keykavus, who was the son of Sultan Gıyased-din Keyhüsrev, the son of Sultan Alaaddin Keykubad" [36] archived at the Başbakanlık Osmanlı Arşivi (Ottoman Archives of the Turkish Republic Prime Ministry Archives) (BOA 12/53) and an example of the charter is submitted as Annex-1. According to the Charter, Sultan Keykavus donated the Kestil village, which is within the vicinity of Konya province and the borders of which are explained in the charter, as a grant (mevkuf) to the "el-Maristanu'l-atik Daru'ş-şifa (Hospital)" as the beneficiary (Meşrutun leh)" [37]. This charter is only one example of many others indicating the contributions made by the rich families of the time to the public health services through the waqf institutions.

Similarly, the support provided by waqfs for the establishment of Darul-shifas (hospitals) can be seen as the following, within another Charter of Waqf, established by Sultan Izzettin 1. Keykavus (Keykavus bin (son of) Keyhüsrev bin (son of) Kılıçarslan) in 17.08.618 (of the Hegira) or 06.10.1221 (A.D.) and approved by "Abdülkerim bin (son of) Mehmet" who was the "Kadi" (the head judge of courts) of Tokat Province during that time:"...five farms, 108 shops and seven gardens, grinder and stud farm are granted with all their borders, equipment, products, seeds and with all their rights and benefits... to the hospital belonging to the whereof waqf established at the entrance of Tokat Street in the out of Sivas Province..." **Source:** Translated by the authors from the charter at Annex-2 [38].

Within the same charter Sultan Keykavus, the founder of the waqf appointed Ferruh bin a-Abdullah, who was the director of the treasury of the palace, as the mütevelli (trustee) for this waqf together with all other waqfs established by himself in all the provinces [38]. Both the high position and the qualifications of the appointed trustee show the high importance given to the administration of waqfs by the Sultan as explained in the charter: "...emîr-i kebîr (great governor), akîl-i habîr (aware

of all intelligence), âlim-i âdil (wise of just), fâdil-1 kâmil (superior of maturity), muzaffer-i müeyyed (proved victorious), mansûr (contributing), müşeyyed (securely), dînin cemâli (pretty appearance of religion), müslümlerin celâli (glory of the Muslims), melîklerin sultânların mu`temedi (trustee of the sultans)...". Furthermore the statement of the charter, which defines the qualities of the medical doctors to be appointed by the trustee, is as the historical projection of today's principals for the administrative and medical ethics and to the administrative autonomy given to the board of trustees: "...Ferruh bin Abdullah is autonomously authorized for the selection and appointment of the "Tabeeb" (doctors), who are preeminent for their knowledge, experience, loyalty, being gentle, good character, and reliability; of the "Jarrah" (surgeons) superior in their applications, compassionateness, medicinal; of the selection, placement and employment of all the servants (and assistant health personnel); and also authorized and responsible for the procurement of all required medicine and equipment ..." [38].

At the succeeding parts of the charter the appointment period of a trustee is limited for three years and it is stated that "...and the posts and tasks shall not be entrusted to cruel, avaricious, imperious, and trickster persons..." [38]. As understood from this statement, instead of the trustee, who completes his/her term of appointment those people shall be assigned who are known for their good moral, ethics and reliability. Similar to the limitations at the appointment and selection process of the board members of the independent regulatory agencies, which are as significant institutions of today's public administration systems, the office terms for the trustees were also limited and by this implementation their fairness and autonomy in decision making was secured. In addition to this application, it is clearly understood from the statement that "...all the income and products of the whereof waqf will be spent for the satisfaction of the needs of poor people forever (as the earth and the sky survive)" [38] all the products and income would be spent for the needs of the poor people benefitting from the Darul-shifa (hospital). These kinds of conditions set by the charters helped to provide a suitable environment to decrease the level of economic and social discrepancies in reaching the provided public services, or at least to minimize it to a tolerable level for the inhabitants of the urban areas.

The above examples studied through the charters of waqfs show that, in the execution of the public services and health services as a part of general public services during the Anatolian Seljuk period, waqfs play a very significant role as a main component of public administration. After having this assessment from the statements of the waqfs' charters by using archive documents, the subjects related to the health services, their administration and personnel issues are investigated in details under the following heading.

## III.1. THE INSTITUTIONS FOR MEDICAL EDUCATION AND THEIR CHARACTERISTICS

The tradition for hospitals, which was taken over from the Medical School of Gundeshapur (an old city geographically lies within the borders of today's Iran and the intellectual centre of the Sassanid empire) by the Islamic Civilizations, have kept on surviving during the period of Seljuk Empire as well, with its double axis, four "eyvan" (vaulted rooms with one side open to a court or salon) Mid-Asian type house-plan [39]. The first madrasah with "eyvan" and "avlu (a kind of courtyard)" was constructed during the period of Artuqid Dynasty (A principality constructed by Oguz Turks in Mardin, Hasankeyf and Harput provinces of Anatolia between the years 1102–1409). The first examples of the type were Hatuniye Madrasah in Mardin (1195), Zinciriye Madrasah in Diyarbakir (1198), and Mesudiye Madrasah (1198–1223) [33]. Although the medical education was mostly conducted at the Darul-shifas, the structures of these Darul-shifas were also similar to those of madrasahs' in terms of their plans [40, 33].

#### III.2. EDUCATION AND TRAINING ACTIVITIES AND MEDICAL TREATMENT

Madrasahs are the university level education and training institutions executing their activities within the frame of designated rules at the Islamic and Oriental tradition. Şemsüddin Sami defines the word madrasah, etymologically which comes from the Arabic root of de-ra-se, as the place in which the lectures are conducted and the students study [41]. The construction of madrasahs under state administration as an official organization was actualized at the Tenth Century during the period of

Karahans (840–1212) [42]. The organization of those institutions as the role models of the following ones [43] and the establishment of their administration and building systems have started during the power of Alp Arslan of Anatolian Seljuks at the Eleventh Century [44]. The first great and significant madrasah, Nizamiye Medresesi was instituted in Nişabur by Nizamü'l-Mülk, who was Vezir (Minister) of Sultan Alp Arslan in 1063 [44, 45]. The first principal of the madrasah was Ebu Ishak Şirâzî [45,46] and his successor was İmam Gazâlî [45]. In the following years their numbers have increased with the new institutions and then they have lost their importance by time [34, 47]. Nevertheless, the madrasah institution has protected its importance as an education institution in Anatolia for a long time. While the Financial needs of these institutions have been provided by waqfs, the government has appointed their board of trustees. This application is a clear reflection of the phenomenon that the education activities were handled as a public service, since the government is closely involved in the administration of them by the assignment of their trustees and principals directly and by this way linked with the public administration indirectly, even though their financial needs were provided by wagfs. Unan's assessment as: the education institutions of the period were established by the State's power and their needs were satisfied through the channels of the waqfs, and they have generated their own administrative traditions under the observation of the government in time [28], also supports this finding.

On the other hand, the medical education and training were executed all on its own as an applied branch of Science, and for this purpose, in addition to Sifahanes/Darul-shifas (hospitals), the madrasahs of medicine were established [28]. The madrasah education was first put into a regular shape by Seljuk's Vezir Nizamü'l-Mülk [46]. The university type high level education and training was conducted in madrasahs of (a) Darû'l-ilim, which are called as ulûmû'l-avâil (teaching mathematics, astronomy, physics, grammar of literature, philosophy, and medicine), and (b) Islamic Education Madrasahs (teaching the topics of Usûl (The methods of Science), Fıkıh (Islamic Law), Hadis (Hadith: the study of the Prophet Muhammad's sayings/deeds) [28]. Çatakoğlu also asserts that the organization of hospitals and the medical education at the Islamic Civilizations were closely related to the establishment of madrasahs and these institutions have carried out an important role in terms of the development of the medical training [14]. The hospitals established within this frame were the institutions where both the medical treatment and health services were executed, the medical students were trained and also the required medicine was produced. Therefore, Darul-shifas were the organizations, at which both the medical treatment services and medical training were conducted simultaneously [39]. In these institutions, while all the people's medical treatment was provided, exempt from their religious, ethnical or language differences, the consultation on the status of the patients and medical training were conducted with a master and apprentice method [48]. The required medicines were also produced at these institutions and provided for the patients free of charge. The Darul-shifas in Anatolia had qualitative staff including sophisticated and skilful doctors and assistant health personnel. The trainees of these institutions got their diplomas after the ratification of their Hodias [33] (instructors of the madrasahs).

The medical knowledge of the Anatolian Seljuks was not only the retention of medical information formed by Turks, but also a reach extension of Islamic medical knowledge towards the Anatolian Seljuk's geography generated in centuries [49]. The Islamic medical advance, following the basis of ancient physicians as Hippocrates and Galen, has continued its effect during the period of Anatolian Seljuks as well and within the frame of classical medical approach; Seljuks' doctors have also followed the ancient theory of Humorism (the balance of 4 elements in the human body: fire, air, water, earth).

The Turks coming from Mid-Asia have shared not only the religious thoughts, but also the scientific and medical knowledge of Islamic civilization also after the Tenth Century, when they had begun to adopt Islam, in addition to the scientific accumulation of Chinese and Indian civilizations they had fought for centuries because of geopolitical reasons [50]. One of the most important aspects of Anatolian Seljuks' Medical development for the Turkish history is that the beginning of the adaptation of medical literature into Turkish and the generation of the first medical resources written in Turkish has started within this period [51]. This tendency has started with a translation named as Tuhfe-i Mübârizî by Doctor Bereket, who was moved from Harezm to Anatolia in the year 1223 or so [33, 52], and has become one of the most important features of Anatolian Medical History even in

Ottoman period with the efforts of Aydınlı Haci Paşa (Hajji Pasha from Aydın) [51]. It is also asserted that the specialization in medical training has also started within this (Thirteenth Century) period.

#### **III.3.** The Employees of Darul-shifas

The authorities of the time were very conscientious in the selection process of the public servants to be employed at the Darul-shifas. That's why the founders of the waqfs specified all the job distributions, required qualities responsibilities, skills and experience levels of the possible servants in detail within the charters [53] of the waqfs establishing the Darul-shifas.

The public servants employed at the Darul-shifas were composed of: tabip (tabeeb/doctor), kehlâl (ophthalmology experts), cerrah (jarrah/surgeon), assistant health servants, aşşâb (pharmacist responsible from the botanical medicine), evdiye-kûb (strong workingman who assists the pharmacist in preparing medicine by using their arm-power), tabbâh (the employees preparing the medicine, which are needed to be mixed with water or to be boiled etc.), kayyûm (nurses), kâse-kes (the employees taking care for the stool pots), ferras (the employees cleaning the rooms), âb-rîzi (the employees cleaning the toilets), came-şûy (the employees working in the laundry), dellâk (janitors), the administrative employees as kâtip (secretary), mahzenci (storehouse supervisor), bevvâb (the security personnel controlling the enter/exit ways and domestic safety, gassal (a kind of undertaker, washing and preparing the corpse according to the Islamic rules), and imam (prayer leader). As can be understood from the Turkish originals of the list, all the employees were named convenient to type of their service [53]. Another important public employee who takes place in the charters of wagfs belonging to Seljuk period is Nigehbân-1 Hastegân (sisters taking care of female patients). Some of the Darul-shifas had female administrators at this period also [54]. Among the doctors serving at the hospital, the most experienced and recognized one was appointed as the chief physician/doctor and the other doctors served as the subordinates of the chief [55]. A lot of recognized doctors were transferred from Egypt, Syria and Iran to Seljuk Darul-shifas [56], and a suitable environment was prepared for their knowledge dissemination.

Another important public service of the time, related to the health services was the mobile doctors, charged by the administrators and sent to the neighbouring cities and villages, to check up on and cure the patients due to their difficult transportation circumstances [57]. The condition for the doctors to be cognizant of the medical science and skilful in surgical area has always been ruling [33].

#### **III.4.** The Administration of Darul-shifas

The administration of the Darul-shifas was executed by the waqfs. All the Darul-shifas had to run their operations according to the conditions of the founding charter. Both the resources of income and the cost of expenses were clearly defined in the conditions of the charters. The salaries of the administrators, instructors and public servants were met from this income and also all the needs of the students were satisfied [58]. The salaries were usually paid with a calculation per day [28].

Some of these charters of waqfs belonging to Darul-shifas, established during the period of Anatolian Seljuks, could reach to present day as the written documents and/or as the reliefs on the structure of the buildings [33]. The information on these charters give us the knowledge about the trustee of the waqf, and the organization, administration, personnel (doctors, surgeons, pharmacists, other public servants), pharmacy department, and medicine of the Darul-shifas of the time. The qualifications as: rahim (compassionate), akranına faik (exceptional among Peer), tecrübeli (experienced), ahlaklı (care in ethics), and şarlatanlıktan uzak (to be far from being faker), determined by the charters for the doctors and employees to be appointed, clearly indicates the sensitivity in the selection and assignment process of the personnel [33].

As stated within the previous paragraphs, while usually the health institutions of the time were administrated by their Waqfs, there are also some documents indicating that in some cases even the Sultans themselves appointed the doctors to be employed. Two of these documents could reach to present day. In the first document, Burhânüddîn Ebû Bekr was appointed as the doctor instead of the deceased doctor of Konya Darul-shifa, because of his qualifications as behaving charitable to patients, not segregating physically or physiologically sick people [22]. In the second document, since his being a successful doctor Şerafeddin Yakûp was appointed as a doctor to the Darul-shifa and the expected ethical behaviours of him were conditioned as: shall not prescribe the contents of the

medicine other than those of approved classical medical achievements, shall not segregate between wealthy and poor patients, shall enlighten the problems of the medical students with clear medical evidences [49].

## III.5. The Spatial Distribution of Health Institutions in Anatolia during the period of Anatolian Seljuks

This distribution is asserted by Özcan as: "(a) In the urban areas positioned at the front lines of the border areas (Çankırı, Kastamonu, Akşehir and Kütahya etc.), (b) In the urban areas as the centres of the economy (The nodes of the transportation network as Sivas, Aksaray, Tokat and Amasya), (c) In the urban areas as the political-administrative centres (Konya and Kayseri), (d) In the urban areas carrying out the function of being the administrative units (Erzen–i Rûm, Malatya, and Kastamonu etc.)" [24].

#### IV. CONCLUSION

The human being has continuously been interested in topics as animal husbandry, agriculture, and technology. Some of those have preferred to rule over the people and the earth and others to produce good monuments for the well-being of humanity. Within this perspective when the administrative history of Turks was investigated, it is seen that after their settlement in Anatolia, Turks have built a synthesis on their deposit from Mid-Asia by transferring the repertoire of the Islamic civilization, Iran and Byzantine cultures, and this synthesis shaped and developed the structure of the urban areas in Anatolia. They have also given a great importance to the execution of public services in general, and health services in particular within these cities, as the economic, political and military centres, in which the citizens survived. According to our investigation, the waqf institution has a special and significant role in the conduct of these services as a perpetuation of national state tradition in the Turkish Administrative History. Among all the Muslim Countries; the Anatolian Seljuks and later the Ottoman Turks handled Wagf institution in the most efficient way and have broadened the role of this Spiritual Human-Welfare Concept. They implemented this system in such a way that the poor and needy population benefit from the services, both in the cities and in the rural areas surrounding them. The noticeable point is: that the Public Health Services provided by the Darul-shifas (Hospitals) were standardized both in quality and quantity, and the efficiency of the management maintained throughout the system. The government control, by appointing and controlling the Mütevelli (Trustee) and by introducing various Fermans (Decrees) to this effect, kept institutions alert and cautious in their performances. Especially in the Darul-shifas, established by Seljuks through these waqfs, both the medical treatment of the patients and medical training activities were conducted simultaneously. Because the official language was Turkish, a lot of recognized medical work was translated to Turkish, and these books have kept their importance in medical Science for a long time by helping the dissemination and the development of the knowledge in Medical Science. When the general organization of these health institutions is investigated we can conclude that:

- a. The population of the urban areas has started to increase since the cities have become natural centres of attraction due to the fact that some of the cities were developed as a synthesis based on their existing heritage taken over from the previous civilizations and some others were reconstructed according to the circumstances of the time, requirements of the trade ways, economic, Political and military requirements. Together with the increasing urban population, the needs for various public services, and exclusively for health services, to satisfy the needs of the residents have increased as well. As a natural result of the urban development, both the Darul-shifas as the institutions for health services and the madrasahs as the medical education institutions to train the doctors were established.
- b. Along with the urban development, the emerging needs for the institution of public organizations related to health services and other public services, for the training of the personnel to be employed at these institutions, for paying the salaries of the employees, for the procurement of the required medicine and materials were met by means of the established wagfs.

Eventually, along with many types of today's public services, falling within the interest areas of local governments or municipalities, the health services were also executed by the waqf institutions founded by the wealthy families of the time in the cities, each of which has formed a natural centre of

attraction with their socio-economic and military development. This administrative tradition was taken over from Anatolian Seljuks by the Ottoman Empire as well and continued until the Nineteenth Century, when the Public services have begun to be organized by the government itself as a function of public administration.

#### REFERENCES

- [1] N.Çavdar, and E.Karcı, "XIX. Yüzyıl Osmanlı Sağlık Teşkilatlanması'na Dair Bibliyografik Bir Deneme", Turkish Studies, 9/4, 2014, 255-286.
- [2] K.Özcan, "Anadolu'da Selçuklu Kentler Sistemi ve Mekânsal Kademelenme (1)", METU JFA, 23/2, 2006, 21-26.
- [3] D.T. Kejanlı "Anadolu'da Selçuklu ve Osmanlı Dönemlerinde Kent Sistemi, Kale ve Merkez-Çarşı Gelişimi", e-Journal of New World Sciences Academy, 5/3, 2010, 287-302.
- [4] M.M. Cerasi, Osmanlı Kenti: Osmanlı Kentinde 18. ve 19. Yüzyıllarda Kent Uygarlığı ve Mimarisi, Aslı Ataöv (trans.), (İstanbul: Yapı Kredi Yayınları, 2. Ed. 2001.
- [5] K. Özcan, "Erken Dönem Anadolu-Türk Kenti Anadolu Selçuklu Kenti ve Mekânsal Öğeleri", bilig, 55, 2010, 193-220.
- [6] E. Aydın, "Türkiye Cumhuriyeti'nin Kuruluş Yıllarında Sağlık Hizmetleri", Ankara Ecz. Fak. Dergisi, 31/3, 2002, 183-192.
- [7] N. Yavuz, Türkiye ve OECD Ülkelerinde Sağlık Sistemleri ve Karşılaştırılması, Master's Degree Graduation Project (Advisor: Assoc.Prof..Dr. İsmail Bekçi), (Isparta: Süleyman Demirel University Social Sciences Institute, 2011.
- [8] O. Turan, Selçuklular Tarihi ve İslam Türk Medeniyeti, (Ankara: Türk Kültürünü Araştırma Enstitüsü), 1965.
- [9] M. Bayartan, "Osmanlı Şehirlerinde Vakıflar ve Vakıf Sisteminin Şehre Kattığı Değerler", Osmanlı Bilimi Araştırmaları, X/1, 2008, 157-175.
- [10] B. Yediyıldız, İslâm'da Vakıf'ın Doğuşundan Günümüze Büyük İslâm Tarihi, (İstanbul: Akçağ Yay., Vol.XIV), 1993.
- [11] Ö. Güngör, "Sosyal Bir Kurum Olarak Vakfı Doğuran Sebepler", Toplum Bilimleri Dergisi, 4/7, 2010, pp.:177-194.
- [12] B. Yediyıldız, "Türk Kültür Sistemi İçinde Vakfın Yeri", Vakıflar Dergisi, XX, 1988, 403–408.
- [13] A. Ertem, "Osmanlıdan Günümüze Vakıflar", Vakıflar Dergisi, 36, 2011, 25-65.
- [14] M. Ş. Çatakoğlu, Anadolu Selçuklu Dönemi İlmi Faaliyetleri ve Bu Faaliyetlerin Osmanlı Kuruluş Dönemi İlmi Faaliyetlerine Tesiri, Master's Thesis, (Advisor: M. Orhan Üner), (Isparta: Süleyman Demirel University, Social Sciences Institute, 2002.
- [15] Ş. Berki, "Vakfın Lüzumu, Faydaları ve Vakıfları Teşvik", Vakıflar Dergisi, V, 1969, 19-21.
- [16] E. Reuter, Beledi Vakıfların Modern Şehir İdaresindeki Ehemmiyetleri, Coşkun Üçok (trans.), (İstanbul: Güven Matbaası, 1942.
- [17] A. A. Adıvar, Osmanlı Türklerinde İlim, (İstanbul: Remzi Kitabevi), 1970.
- [18] V. Aydın, "Türk Yönetim Tarihi Açısından Vakıf Sistemi ve Türk Yönetim Tarihine Katkısı", Süleyman Demirel Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 8/1, 2003, 313-338.
- [19] Y. Akyüz, Türk Eğitim Tarihi (Başlangıçtan 1993'e), (İstanbul: Kültür Koleji Yay. 4.Baskı-4th Ed.), 1993.
- [20] H. B. Kunter, "Türk Vakıfları ve Vakfiyeleri Üzerine Mücmel Bir Etüd", Vakıflar Dergisi, 1, 1938, 103-129.
- [21] A. Akgündüz, İslam Hukukunda ve Osmanlı Tatbikatında Vakıf Müessesesi, (Ankara: Türk Tarih Kurumu Yay.), 1988.
- [22] O. Turan, Türkiye Selçukluları Hakkında Resmi Vesikalar, 2nd Ed., (Ankara: Atatürk Kültür, Dil ve Tarih Yüksek Kurumu Yay.), 1988.
- [23] K. Özcan, and Z. Yenen, "Anadolu-Türk Kent Tarihine Katkı: Anadolu Selçuklu Kenti (XII. Yüzyılın Başından XIII. Yüzyılın Sonuna Dek)", Megaron, 5/2, 2010, 55-66.
- [24] K. Özcan, Anadolu'da Selçuklu Dönemi Yerleşme Sistemi ve Kent Model(ler)i, PhD Thesis, (Konya: Selçuk University, Institute of Science), 2005.

- [25] M. Bayartan, "Osmanlı Şehrinde Bir İdari Birim: Mahalle", Coğrafya Dergisi, 13, 2005, 93-107.
- [26] S. Göney, Şehir Coğrafyası, (İstanbul: İstanbul Üniversitesi Edebiyat Fakültesi Yay.), 1995.
- [27] Sağlık Hizmetlerinde 50 Yıl, Cumhuriyetten Önce Anadolu Türklerinde Sağlık Hizmetleri. (Ankara: Sağlık Sosyal Yardım Bakanlığı Yay.), 1973, 13-15.
- [28] F. Unan, "Anadolu Selçukluları ve Beylikler Döneminde Eğitim" in Sosyal ve Siyasal Hayat, Vol.:1, Ahmet Yaşar (ed.), (Ankara: T.C.Kültür ve Turizm Bakanlığı Yay.), 2006, 395-398.
- [29] A. Sevim, and E. Merçil, Selçuklu Devletleri Tarihi Siyaset, Teşkilat ve Kültür, (Ankara: Atatürk Kültür, Dil ve Tarih Yüksek Kurumu Yay.), 1995.
- [30] Büyük Larousse Sözlük ve Ansiklopedisi, (İstanbul: İnterpress Basın ve Yay. Vol.6), 1986.
- [31] İ. H. Uzunçarşılı, Osmanlı Devletinin İlmiye Teşkilâtı, (Ankara: Atatürk Kültür, Dil ve Tarih Yüksek Kurumu Yay.), 1988).
- [32] N. Kösoğlu, Türk Dünyası Tarihi ve Türk Medeniyeti Üzerine Düşünceler, (İstanbul: Ötüken Yayınevi), 1990.
- [33] G. Cantay, Anadolu Selçuklu ve Osmanlı Darüşşifaları, (Ankara: Atatürk Kültür, Dil ve Tarih Kurumu Atatürk Kültür Merkezi Yay.), 1992.
- [34] K. İ. Gürkan, Selçuklu Hastaneleri. Malazgirt Armağanı, (Ankara: Türk Tarih Kurumu Yay.), 1993.
- [35] A. Acıduman, "Darüşşifalar Bağlamında Kitabeler, Vakıf Kayıtları ve Tıp Tarihi Açısından Önemleri-Anadolu Selçuklu Darüşşifaları Özelinde", Ankara Üniversitesi Tıp Fakültesi Mecmuası, 63/1, 2010, 9-15.
- [36] BOA (Başbakanlık Osmanlı Arşivi-The Ottoman Archives of the Prime Ministry), Evkaf-Vakfiye, Dosya 12, Gömlek 53, (File No: 12 (53)), Kadı İzzettin'in Konya Mâristan-ı Atik (506 of the Hegira/1113 A.D.) Tarihli (Dated) Vakfiyesi (Kadı İzzettin's Konya Mâristan-ı Atik Charter of Waqf), Vakıf (Founder): Sultan Keykavus.
- [37] K. Şahin, 2007, "Konya Kadı İzzeddin Mâristân-ı Atik (Hastanesi) ve Sultan Alâddin Keykubat Darüşşifası", Vakıflar Dergisi, 30 2007, 101-116.
- [38] VGM, 584–288–138: Vakıflar Genel Müdürlüğü Arşivi (The Archives of the General Directorate of the Waqfs-Turkey), Defter (Book) No:584, Sayfa (Page) No: 288, Sıra (Order) No: 138; (17.08.618 of the Hegira)/06.10.1221 (A.D.). Tokat Kadısı (Kadı of Tokat province). Abdülkerim bin Mehmet imzalı (signed by), Vakıf (Foundation): Keykavus bin Keyhüsrev bin Kılıcarslan Vakfiyesi (Charter of Waqf).
- [39] E. Aydın, Anadolu'daki Ticaret Yolları ve Selçuklu Sağlık Hizmetleri, Yeni Tıp Tarihi Araştırmaları, (İstanbul: Lito Matbaası), 1996, 166-171.
- [40] Meydan Larousse Büyük Lügat ve Ansiklopedisi, 17.Cilt, (İstanbul: Sabah Yay.), 1992.
- [41] S. Şemsüddin, "Medrese' in Kâmûs-ı Türkî" (Dersaadet: İkdam Matbaası), 1317 (of the Hegira).
- [42] Z. Atçeken, Konya'daki Selçuklu Yapılarının Osmanlılar Devrinde Bakımı ve Kullanılması, (Ankara: Türk Tarih Kurumu), 1998.
- [43] M. Bilge, İlk Osmanlı Medreseleri, (İstanbul: Edebiyat Fakültesi Basımevi), 1984.
- [44] S. Tekeli, "Büyük Selçukluların Uygarlığa Katkıları", Erdem Dergisi (Atatürk Kültür, Dil ve Tarih Yüksek Kurumu Yay.), Vol.25, 1996, 395-396.
- [45] D. Günay, "Medreseden Üniversiteye Trajik Bir Yolculuk", Mimar ve Mühendis, Vol.26, 1999,41-49.
- [46] S. Zaimeche, Toledo, (United Kingdom: Foundation for Science Technology and Civilisation), 2005.
- [47] A. Gül, Osmanlı Medreselerinde Eğitim-Öğretim ve Bunlar Arasında Dâru'l-Hadîslerin Yeri, (Ankara: Atatürk Kültür, Dil ve Tarih Yüksek Kurumu Yay.), 1997.
- [48] G. Cantay "Darüşşifalar", in Anadolu Selçukluları ve Beylikler Dönemi Uygarlığı (Mimarlık ve Sanat 2.Cilt), Peker, Ali Uzay and Bilici, Kenan (ed.), (Ankara: T.C.Kültür ve Turizm Bakanlığı Yay.), , 2006, 313-314.
- [49] A. H. Bayat, Tip Tarihi, (İzmir: Sade Matbaası), 2003.
- [50] M. E. Atabek, and Ş. Görkey, Başlangıcından Rönesansa Kadar Tıp Tarihi, (İstanbul: İstanbul Üniversitesi Cerrahpaşa Tıp Fakültesi Yay.), 1998.

- [51] İ. Fazlıoğlu, "Selçuklu Döneminde Anadolu'da Felsefe ve Bilim", Cotigo Dergisi Yapı Kredi Yayınları, Vol.29, 2001, 152-168.
- [52] C. İzgi, "Anadolu Selçuklu Tabipleri", in III. History of Medicine Congress Conference Book, (Ankara: Atatürk Kültür, Dil ve Tarih Yüksek Kurumu Yay.,), 1993.
- [53] N. Sarı, "Osmanlı Darüşşifalarına Tayin Edilecek Görevlilerde Aranan Nitelikler", Yeni Tıp Tarihi Araştırmaları. (İstanbul: Lito Matbaası), 1995, 14-47.
- [54] N. Yıldırım, Nuran, "İslam Tarihi Boyunca Sağlık Hizmetlerinde Kadınların Yeri", Diyanet Aylık Dergisi, (Eylül-September) 1999, 105:24.
- [55] S. Ünver, Anadolu Selçuklularında Sağlık Hizmetleri, (Ankara: Türk Tarih Kurumu Yay., Malazgirt Armağanı), 1993.
- [56] K. Özbay, Türk Asker Hekimliği Tarihi ve Asker Hastaneleri, (İstanbul: Yörük Basımevi), 1976.
- [57] M. Bayram, "Anadolu Selçukluları Dönemi Tababeti ile İlgili Bazı Notlar", Yeni Tıp Tarihi Araştırmaları, (İstanbul: Lito Matbaası),1998, 150-151.
- [58] A. İnan, Kayseri'de Gevher Nesibe Şifaiyesi, Malazgirt Armağanı, (Ankara: Türk Tarih Kurumu Yay.), 1993.