



Review Paper

A new health service by Izmir Public Health Directorate in 2012: home health services

Sinem Doğanay¹, Ozlem Pekel², Ebru Turhan³ and Mustafa Tozun^{3*}

¹Gaziemir Community Health Center, Izmir

²Izmir Public Health Directorate, Izmir

³Izmir Kâtip Celebi University, School of Medicine, Public Health Department, Izmir
mtzn76@gmail.com

Available online at: www.isca.in, www.isca.me

Received 30th September 2017, revised 26th November 2017, accepted 6th December 2017

Abstract

The study's purpose was to determine the distribution of the patients who need health services at home according to age groups and diseases in Izmir province, 2012. This study is a descriptive research. This study was carried out by evaluating the records of 4918 patients registered with the Public Health Center Coordination Center in Izmir Public Health Department in 2012. Diseases were categorized as cerebrovascular disease, stroke, coronary artery disease, Alzheimer, diabetes mellitus, hypertension, dementia, Parkinson's disease, epilepsy, cerebral palsy and the other diseases. Chi-square test was used for categorical variables determining. For significance, $p < 0.05$ was considered. Females' percentage was 60.5% (n: 2902). Ages' distribution was found that 16.8% in the 46-65 age group, and 49.1% in the 66-85 age groups. Percentages of the most common diseases were found as follows: Cerebrovascular disease and stroke; 30.5%, Coronary artery disease; 11.7, Alzheimer; 9.5, Diabetes mellitus and Hypertension; 9.4, Dementia and Parkinson's disease; 6.6%, Epilepsy; 5.2%, and Cerebral Palsy; 4.3%. For each disease frequency, there was no difference by gender (for each one $p > 0.05$). HHS is a new application in Izmir (for 2012). It is believed that this practice will prevent hospitalization and reduce hospitalization times and reduce treatment costs, ultimately contributing to the country's economy. Finally, HHS should be better coordinated with projects and other institutions.

Keywords: Home Care Services, Home Health Services, Public Health, Izmir, Turkey.

Introduction

Home Care Services (HCS) and Home Health Services (HHS) are services that need to be carried out together. Their historical development is similar. However, these are two services that are currently under different coordination. The definitions of both services are also different. Let us first look at the historical development: Historical development of providing HHS / HCS is considered to have begun in Rome with debates about whether births are at home or in hospital. In the Medieval Europe, HHS / HCS has come into being with the isolation of patients with communicable diseases at home. We can say that when the medical service offered at home is in the foreground HHS call has started to be used. Additionally, if the dimension of social assistance has come to the forefront, HCS call was preferred. In the late 19th century, in Europe, poor and sick people living in cities began to be treated and supported at home because they could not find the money needed for care in the hospital. Home care has been adopted by volunteer organizations as a way of providing basic services under the leadership of the church in-home care services for many years. But the other than religious organizations could not be realized until 1859 in real terms. In the 20th century, institutionalization studies began to provide HCS through

trained home visitors in the UK. Two people come to the fore for home care services: William Rathbone and Mary Robinson. Rathbone, a British anthropologist, has created a volunteer nursing service for the poor. Robinson is the first nurse in Liverpool to provide home nursing services. Florence Nightingale, which laid the foundation of the nursing profession, has also undertaken preliminary studies for nurses to carry out HHS / HCS. During this period, much progress has been made in the US regarding HHS. Lillian Wald is the nurse who leads the United States. Visitor nurses also added preventive care services to their work. Social workers also took part in these activities. Denmark has become a model with its most advanced home visiting program in Europe. Home care services in the health system in China are used as a method of providing services for the elderly. The main providers of services are those trained for HHS delivery within the family (informal care). As every day, the importance of HHS / HCS has always increased, and these services are rapidly spreading in all countries, one of these countries in Turkey^{1,2}.

The comprehensive definition of HCS is as follows: "HCS is psychosocial, physiological and medical support services and social services that presents with aims to support individuals in own environment and to alleviate the burden on the family, and

to ensure their adaptation to social life, and to continue their lives in a happy and peaceful manner for people as elderly, physically and mentally handicapped, individuals with chronic illness or recovery³.". HCS is realized by the Ministry of Family and Social Policy in Turkey⁴.

The comprehensive definition of HHS is as follows: "HHS is services as examination, diagnosis, treatment and rehabilitation that present towards the bed-dependent patients or patients with various chronic or malignant diseases or difficult to reach to the health institution patients, by the professional health team"⁵. We can say that HHS is the medical service dimension of HCS.

Although written in western literatures that these services are of European origin, in the medical history of Turkey, HCS / HHS has a history based on the Middle Ages. Mobile medical services were offering in the Ottoman State in the 15th century.

Their patients' care was made by family members, generally. In the following years, private nurses and patient caregivers at home as formal caregivers, and family members as informal caregivers have continued HCS⁴.

The first legal regulation in this area is "General Protective Health Law" (Date: 1930, No: 1593, Turkish original: Umumi Hifzisiyhha Kanunu). This law contains issues about treatment of infectious diseases and examinations at home⁶. In the framework of the Health Plan prepared by Dr. Behcet UZ in 1946, organizations related to mobile services through Health Centers were planned. In this planned service, teams which included doctors, midwives, nurses and health officials were involved in home visits⁷. With the "Law on the Socialization of Health Services" (Date: 1961, No: 224, Turkish original: Sağlık Hizmetlerinin Sosyallestirilmesi Hakkında Kanun), monitoring and care of people with chronic illness have been given to health centers (Turkish original: Sağlık Ocagi) responsibilities⁸. Private hospitals that were established after 1980 started to provide health services at home after discharge to patients².

With the *Health Transformation Program*, Turkey launched family medicine applications in 2005. With *Family Medical Practice Regulation* (Date: 25.05.2010, No: 27591, Turkish original: Aile Hekimliği Uygulama Yönetmeliği), family physicians have also been given duties for home health care⁹. With *Regulation on the Presentation of Home Care Services* (Date: 10.3.2005, No: 2575, Turkish original: Evde Bakım Hizmetleri Sunumu Hakkında Yönetmelik), services on home care have been regulated in Turkey¹⁰. Additionally, with *By the Turkish Ministry of Health, Directive on Implementation Procedures and Principles of Health Services Provided* (Date: 01 Şubat 2010, No: 3895, Turkish original: Sağlık Bakanlığınca Sunulan Evde Sağlık Hizmetlerinin Uygulama Usulve Esasları Hakkında Yönerge), home health services in Turkey have been regulated¹¹.

According to the legislation in Turkey, HHC is provided at the institutions / units as follows: i. Education and Research

Hospitals of the Ministry of Health, ii. Oral and Dental Health Centers, iii. Oral and Dental Health Hospitals, iv. Mobile Teams Created in the Public Health Directorates', v. Community Health Centers and vi. Family Health Centers. Service management, communication and coordination between the units are provided by the Coordination Center established by the Province Directorate of Public Health¹².

In 2015, a "Regulation on the Home Health Services by the Ministry of Health and its Affiliates" (Date: 27.02.2015, No: 29280, Turkish original: Sağlık Bakanlığive Bağli Kuruluşları Tarafından Evde Sağlık Hizmetlerinin Sunulmasına Dair Yönetmelik) was issued for home health services. According to this regulation, the official definition of HHC in Turkey is as follows: "*Home health service*: Examination, diagnosis, analysis, treatment, medical care, follow-up and rehabilitation services that are given to the individuals who need to take home health care services due to various diseases, including social and psychological counseling services at home and family environment are HHC"¹³.

In 2017, an amendment was made to the Ministry of Health with the Decree Law No. 694 on the organizational structure. Public health provincial directorates are closed. Coordination of health services at home has passed to Provincial Health Directorate¹⁴. Family Health Centers and Community Health Centers have also been removed from home health services and the delivery of these services has been transferred to hospitals.

Turkey, patient groups that are eligible for HHC are: *Cardiovascular diseases, Endocrinological diseases, Emergency medicine, Gastro-intestinal diseases, Hematology-oncology, Infectious diseases, Nephrological diseases, Neurological diseases, Obstetric patients* (fetal monitoring, breastfeeding education, postpartum care), *Pediatric diseases, Psychiatric diseases and Chest diseases*¹.

The study's purpose was to determine the distribution of the patients who need health services at home according to age groups and diseases in İzmir province, 2012.

Materials and methods

This study is a descriptive research. This study was carried out by evaluating the records of 4918 patients registered with the Public Health Center Coordination Center in İzmir Public Health Department in 2012. And 121 of the 4918 patients (2.5%) were not recognized during the registration.

A total of 4797 patient' records (97.5%) were evaluated. Diseases were categorized as cerebrovascular disease, stroke, coronary artery disease, Alzheimer, diabetes mellitus, hypertension, dementia, Parkinson's disease, epilepsy, cerebral palsy and the other diseases.

Ages are grouped as 2 years and below, from 3 to 18 years, from 19 to 45 years, from 46 to 65 years, from 66 to 85 years and 86 years and upper.

During the study period, the researchers were in charge of administration in Izmir Public Health Directorate. Ethical approval of Izmir Public Health Directorate was obtained for the study.

The results of this study were presented as a poster at the 16th National Public Health Congress (Antalya, Turkey, 27-31 October 2013).

SPSS 22.0 statistical analysis program was used for statistical analyses. Frequency values (n,%) were presented as statistical data. Chi-square test was used for categorical variables determining. For significance, $p < 0.05$ was considered.

Results and discussion

Females' percentage was 60.5% (n: 2902). Distribution for ages as follows: 0.4% of the subjects were under two years of age, 6.5% were in the age group of 3-18 years, 11.0% in the 19-45 age group, 16.8% in the 46-65 age group, 49.1% in the 66-85 age group, 16.2% were in the age group of 86 years and over.

Percentages of the most common diseases were found as follows: Cerebrovascular disease and stroke; 30.5%, Coronary artery disease; 11.7, Alzheimer; 9.5, Diabetes mellitus and Hypertension; 9.4, Dementia and Parkinson's disease; 6.6%, Epilepsy; 5.2%, and Cerebral Palsy; 4.3%.

For each disease frequency, there was no difference by gender (for each one $p > 0.05$).

Distribution of percentages of the most common diseases in home health care services by gender was presented in Table-1.

Discussion: Nowadays, the importance of HHS is increasing for many reasons such as the need for the elderly, the chronic illnesses and the disabled people to constantly need care, and the development in medicine and technology. Therefore, the idea of providing HHS has been developing in many countries. It is known that 7.3% of Turkey's population is over 65 years old and 12.3% of them are disabled individual¹⁵. For this reason, we can estimate that most of the HHS will be caregiver for elderly and chronic diseases in Turkey.

When we look at the researches that done on HHS in Turkey, we have seen that the following results are reported:

Cayir et al.⁵ evaluated 57 people who received health services in Erzurum, Eastern Turkey. According to the frequency of HHS patients, the first five rows that hemiplegia; 26.3%, Alzheimer; 21.1%, terminal cancer; 17.5%, chronic obstructive pulmonary disease (COPD); 10.5% and Parkinson's disease 7%. Isik et al.⁴ reached 214 patients in Kirikkale, Central Anatolia Region of Turkey. The greatest number of referral cases was arm or leg or hip fractures (27.4%). Other major admission factors were hypertension (18.8%), diabetes mellitus (15.1%) and stroke

(14.1%). By Cubukcu & Yazicioglu², patients were reached in Samsun, North Turkey. The most common disease was cerebrovascular disease in 21.42%. After that hypertension (15.21%) and diabetes mellitus (9.63%) follows, respectively. Karaman et al.¹⁶ evaluated 1280 people who received HHS in Zonguldak, Western Black Sea Region of Turkey. The most common diseases were reported as Neurological (51.6%), respiratory system (12.8%), endocrine system (7.3%), cardiovascular system (7.2%), oncologic (6.4%), and orthopedic and traumatological (6.3%). Onder et al.³ evaluated 52 patients in Sarikamis district of Kars city, Eastern Turkey. In their study, with 18 patients (34.6%), cerebrovascular diseases were the largest group. This was followed by Alzheimer's disease with 9 patients (17.3%). Catak et al.¹⁷ reached 140 people whose 65 years and over groups in Burdur, Southwest Turkey. For the elderly receiving HHS, it was reported hypertension (48.1%) and stroke (39.8%) as the most common diseases.

Table-1: Distribution of percentages of the most common diseases in home health care services by gender.

Diseases	Gender			
	Male		Female	
	n	%	n	%
Cerebrovascular disease and stroke. (Total: 1461; 30.5%)	597	31.6	864	29.7
Coronary artery disease (Total: 563; 11.7%)	226	12.0	337	11.6
Alzheimer. (Total: 461; 9.5%)	160	8.5	297	10.2
Diabetes mellitus and Hypertension. (Total: 449; 9.4%)	166	8.8	283	9.7
Dementia and Parkinson's disease. (Total: 316; 6.6%)	109	5.8	207	7.1
Epilepsy (Total: 249, 5.2%)	115	6.1	134	4.6
Cerebral Palsy. (Total: 205; 4.3%)	69	3.7	136	4.7

*The total is not 100% since other diseases are not shown. Column percent presented. ** By chi square analyses, distribution of diseases by gender was not found different statistical significance (for each one, $p > 0.05$).

With general evaluation; cerebrovascular diseases, coronary artery diseases, stroke, hypertension and diabetes mellitus are at the front line in HHS. Our results compared with the other studies seem to be consistent.

Limitations: The cross-sectional formation of our study is the most important limitation. From the Directorate of Public Health, established in 2012, we could not able to obtain data after 2012. Therefore, trends in diseases' frequency could not be followed.

Conclusion

In the future, it is thought that HHS will have a very important place for Turkey where the population is aging. HHS is a new application in Izmir (for 2012). It is believed that this practice will prevent hospitalization and reduce hospitalization times and reduce treatment costs, ultimately contributing to the country's economy. Finally, HHS should be better coordinated with projects and other institutions.

References

1. Yılmaz M., Sametoğlu F., Akmeşe G., Tak A., Yağbasan B., Gökçay S. and Erdem S. (2010). In-Home Health Services as an Alternative Form of Presentation of Patient Care. *Istanbul Med J*, 11(3), 125-132.
2. Çubukçu M. and Yazıcıoğlu B. (2016). Evaluation of the Patients Registered to Samsun Education and Research Hospital Home Care Services Unit. *Ankara Med J*, 16(4), 325-331.
3. Önder T., Anuk T., Kahraman Ş. and Yıldırım A.C. (2015). Evaluating sociodemographic and medical conditions of patients under home care service. *Dicle Medical Journal*, 42(3), 342-345.
4. Işık O., Kandemir A., Erişen M.A. and Şidan C. (2016). Profile of Patients Who Use Home Care Health Services and Evaluation of Provided Service. *Hacettepe Sağlık İdaresi Dergisi*, 19(2), 171-186.
5. Çayır Y., Avşar Ü.Z., Avşar U., Cansever Z. and Khan A.S. (2013). Characteristics of Patients Who Receive Home Health Services and Expectations of Caregivers. *Konuralp Tıp Dergisi*, 5(3), 9-12.
6. Umumi Hifzi sihha Kanunu (1930). Bu Kanun ile ilgili tüzük için, "Tüzükler Külliyyatı"nın kanunlara göre düzenlenen nümerik fihristine bakınız. (General Protective Health Law, Date: 1930, No: 1593. <http://www.mevzuat.gov.tr/MevzuatMetin/1.3.1593.pdf> (Available: 30.09.2017).
7. Sağlık Bakanlığının Tarihçesi (2015). Turkish Republic of Ministry of Health. <https://www.saglik.gov.tr/TR,11492/tarihce.html> (Available: 30.09.2017).
8. Kanun S.H.S.H. (1961). Kanun no: 224. Kabul Tarihi, 5(1.1961).. (Law on the Socialization of Health Services, Date:1961, No: 224. <http://www.mevzuat.gov.tr/MevzuatMetin/1.4.224.pdf> (Available: 30.09.2017).
9. BİRİNCİ BÖLÜM (2013). Aile Hekimliği Uygulama Yönetmeliği. (Family Medical Practice Regulation, Date: 25.05.2010, No: 27591. <http://www.mevzuat.gov.tr/Metin.Aspx?MevzuatKod=7.5.17051&MevzuatIliski=0&sourceXmlSearch=aile%20he> (Available: 30.09.2017).
10. BİRİNCİ BÖLÜM (2005). Evde Bakım Hizmetleri Sunumu Hakkında Yönetmelik. (Regulation on the Presentation of Home Care Services, Date: 10.3.2005, No: 2575. <http://www.mevzuat.gov.tr/Metin.Aspx?MevzuatKod=7.5.7542&MevzuatIliski=0&sourceXmlSearch=evde%20bak%C4%B1m> (Available: 30.09.2017).
11. Bakanlıđı S. (2016). Sağlık Bakanlığınca Sunulan Evde Sağlık Hizmetlerinin Uygulama Usul ve Esasları Hakkında Yönerge. (Directive on Implementation Procedures and Principles of Health Services Provided by the Ministry of Health, Date: 01.02.2010, No: 3895. <https://www.saglik.gov.tr/TR,11271/saglik-bakanliginca-sunulan-evde-saglik-hizmetlerinin-uygulama-usul-ve-esaslari-hakkinda-yonerge.html> (Available: 30.09.2017).
12. Turkish Republic of Ministry of Health (2017). Halk Sağlığı Yönetim Sistemi Evde Sağlık Modeli Kullanım Kılavuzu. (Public Health Management System, Home Health User Guide). <http://dosyahsm.saglik.gov.tr/Eklenti/1568,evde-saglik-modulu-kullanim-kilavuzupdf.pdf?0> (Available: 30.09.2017).
13. Sağlık Bakanlıđından (2015). Sağlık Bakanligive Bağlı Kuruluşları Tarafından Evde Sağlık Hizmetlerinin Sunulmasına Dair Yönetmelik. (Regulation on the Home Health Services by the Ministry of Health and its Affiliates, Date: 27.02.2015, No: 29280. <http://www.resmigazete.gov.tr/eskiler/2015/02/20150227-14.htm> (Available: 30.09.2017).
14. Karar Sayısı (2017). Olaganüstü Hal Kapsamında Bazı Düzenlemeler Yapılması Hakkında Kanun Hukmünde Kararname. (Decree-Law About Performing Some Tasks Within the Context of Exceptional State, No: 694). <http://www.resmigazete.gov.tr/eskiler/2017/08/20170825-13.pdf> (Available: 24.09.2017).
15. Limnili G. and Özçakar N. (2013). Evde sağlık hizmetlerine başvuru özellikleri ve beklentiler. *Türkiye Aile Hekimliği Dergisi*, 17(1), 13-17.
16. Karaman D., Kara D. and Atar N.Y. (2015). Evde sağlık hizmeti verilen bireylerin hastalık durumlarının ve bakım ihtiyaçlarının değerlendirilmesi: Zonguldak örneđi. *Gümüşhane University Journal of Health Sciences*, 4(3), 347-359.
17. Çatak B., Kiliç A.S., Badıllıoğlu O., Sütü S., Sofuoğlu A.E. and Aslan D. (2012). Burdur'da evde sağlık hizmeti alan yaşlı hastaların profili ve evde verilen sağlık hizmetleri. *Turkish Journal of Public Health*, 10(1), 13-21.