

Utilization of Health Services by the Elderly in Turkey between 2008 and 2012: Analysis of Turkstat Health Surveys

Rojan GÜMÜŞ¹, Arif ŞAHİN¹

ABSTRACT

As the population of elderly people increases gradually, enhancing their physical and mental health has become one of the most crucial goals today. Enhancing health of elderly comes from adequate utilization of health services and elders' satisfaction from them. This study is aimed to determine utilization of health services by the elderly and their satisfaction about it in Turkey between 2010-2012. Data was obtained from TurkStat (Turkish Statistical Institute) by formal permission. It included results of two health research surveys in Turkey biennially performed and published as reports at the end of 2010 and 2012. In this study, results of two periods were compared. Sample included 1798 participants for year 2010, and 3396 for 2012. All participants were 65+ age. There were very important indicators such as measurement of blood pressure, cholesterol test, blood sugar test, gaita tests and other medical laboratory tests (bilirubin, allergy, albumin, urine, hormone, vitamin, etc.). Also mammography and prostate controls were included. Conducting these tests in the last 12 months and visiting private and public institutions, family doctors, specialists, emergency services and delivering home care were taken into account in order to find utilization of health services by the elderly. There was a meaningful increase in visiting family doctors in the two periods ($X^2=1152.591$, $p<0.001$). Also, there was a significant difference in home care services rendered by nurses and other health workers in the two review years ($X^2=12.476$, $p<0.01$). Although increasing ratios were seen with regards to all kinds of healthcare services, statistical significance has been found in delivering some tests like blood pressure ($X^2=5.576$, $p<0.05$), cholesterol ($X^2=13.133$, $p<0.001$), sugar ($X^2= 21.724$, $p<0.001$) and other laboratory tests ($X^2=20.081$, $p<0.001$). Additionally increase in delivering radiology tests ($X^2= 12.288$, $p<0.001$) was significant. Any significance were found according to utilization of other health services during two periods. When results of two periods were compared, a meaningful increase was seen in satisfaction of elderly by health services on behalf of family doctors, private health institutes and home care services. As it has been seen from our finding right policies executed by governments lead to improvements in patient's attitude to access healthcare.

Keywords: Elderly; health care utilization; satisfaction; Turkey.

Türkiye'de 2008 ve 2012 Yılları Arasında Yaşlı Bireylerin Sağlık Hizmetlerinden Faydalanma Düzeyinin TÜİK Sağlık Araştırmasına Göre Belirlenmesi

ÖZ

Dünyada yaşlanan nüfus her yıl artmaktadır olduğundan yaşlıların fiziksel ve zihinsel sağlığını en yüksek düzeyde tutmak son yılların en önemli hedefleri arasındadır. Yaşlıların sağlık düzeyini yükseltebilmek doğru sağlık hizmetini yeterli bir şekilde ulaştırmaktan geçer. Bu çalışmanın amacı Türkiye'de yaşlıların sağlık hizmetlerinden yararlanma düzeylerini ve bu hizmetlerden memnuniyetlerini ortaya çıkarmaktır. Araştırmada kullanılan veriler Türkiye İstatistik Kurumu'nun 2010 ve 2012 yılları sonunda rapor edilen sağlık araştırmasından alınmıştır. Bu veriler 2010-2012 yılları arasındaki hane halkı sonuçlarını kapsamaktadır. Söz konusu iki dönem verileri karşılaştırılmış, 65 yaş üzeri 2010 yılından 1798, 2012 yılından 3396 kişi çalışmaya dâhil edilmiştir. Yaşlıların en çok başvurduğu tansiyon, kolesterol, şeker, gaita ve diğer önemli laboratuvar testleri ile prostat, mamografi kontrolleri değerlendirmeye alınmış, bu sağlık hizmetlerinin son 12 ayda kullanılma sıklığı esas alınmıştır. Bunun yanında yine son 12 ayda devlet hastaneleri, özel hastaneler, aile hekimleri, uzman hekimler tarafından muayene olma ve acil servislere başvurma sayıları değerlendirilmiştir. Tüm bunlara ek olarak, evde bakım hizmetlerinden faydalanma araştırma kapsamına alınmıştır. İstatistik karşılaştırmalar sonucu, aile hekimlerini ziyaretlerde ($X^2=1152.591$, $p<0.001$), ve evde bakım hizmetlerini kullanmada ($X^2=12.476$, $p<0.01$) önemli bir artış gözlenmiştir. Son 12 ayda tüm sağlık hizmetlerinin kullanılmasında genel bir artış görülürken, tansiyon ($X^2=5.576$,

¹ Dicle Üniversitesi Atataürk Sağlık Hizmetleri Meslek Yüksekokulu

Correspondence: Rojan GÜMÜŞ

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$p<0.05$), kolesterol ($X^2=13.133$, $p<0.001$), şeker ($X^2=21.724$, $p<0.001$) ve diğer laboratuvar testleri yaptırma önemli bir artma görülmüştür. Ayrıca, radyoloji servislerinin kullanılmasında ($X^2=12.288$, $p<0.001$) da belirli bir artış kaydedilmiştir. Diğer sağlık hizmetlerinin kullanımında bir fark bulunamamıştır. İki dönemde yapılan sağlık araştırmaları karşılaştırıldığında, aile hekimleri, özel sağlık kuruluşları ve evde bakım hizmetleri ile ilgili belirgin bir kullanım artışı ve memnuniyet görülmüştür. Bu sonucun son yıllarda devlet tarafından gerçekleştirilen ve hastanın sağlık hizmetlerine ulaşımını kolaylaştıran faydalı değişikliklerden kaynaklandığı belirlenmiştir.

Anahtar Kelimeler: Yaşlı; sağlık hizmetlerinden faydalanma; memnuniyet; Türkiye.

1. INTRODUCTION

People everywhere are living longer according to the "World Health Statistics (2014)" as published by WHO. Based on global averages, a girl who was born in 2012 could be expected to live up to 73 years, and a boy, to the age of 68. This is six years longer than the average global life expectancy for a child born in 1990 (1). In Europe, life expectancy is generally higher than in most regions of the world and continues to increase; in 2012, life expectancy at birth in the EU-28 was 80.3 years (2). On the other hand, it is shorter in Turkey, 76.3 according to Turkish Statistical Institute Life Tables 2013. But, this number is increasing every year (3).

Ageing is a natural and inevitable process that causes differences in the mental abilities, social capabilities and psychological conditions of individuals who experience certain alterations in anatomical structure and physiological functions (4). As the elderly population is expected to increase gradually, enhancing their physical and mental health has become one of the most crucial goals today (5). Elders' life quality is affected by their health status or life quality. Quality of life is a term that is used in every day conversation and viewed as a desired goal for most people. It is defined as a perception of satisfaction with life, overall or subjective well-being it is affected by health status or level of function (6). Life quality comes from health satisfaction and health satisfaction comes from adequate utilization of health services in the country.

In developing countries like Turkey, it is extremely important to completely and accurately determine the healthcare needs of the community so that equal and qualified services can be provided in order to meet those needs (5). Older adults in particular may behave differently from the rest of the population regarding their healthcare seeking behavior. This is because; the perceived benefits of healthcare may vary as the expected remaining life time diminishes with age (7). Services rendered to elderly people are affected by socio-cultural structure of the society, changes in attitude and behaviors, individual's and society's perception of ageing (8). Decrease in income and increasing health problems are among the central problems faced during the old age. Because of dwindling budgetary allocation of resources for health by for the state and its attendant effects on individuals (9).

In our country elderly people have many difficulties in

maintaining their life. Their quality of life is associated with their health condition. For the fact that utilization of health services are affected by some factors, some of elderly cannot access health services easily. Leading among these factors are age, gender, marital status, education level. Also socio-economic variables such as working status, perceived income status, health insurance, etc. of elderly people, play a big role in utilization of health services.

The aim of this study was to investigate changes in utilization of health services by the elderly between 2008 and 2012. Additionally satisfaction with health services in each of the two years was in the focus. While doing that, we used some health related indicators, like delivery of measurement of blood pressure, cholesterol, blood sugar, gaita and other medical laboratory tests (bilirubin, allergy, albumin, urine, hormone, vitamin, etc.). Also, mammography and prostate controls were included. Conducting these tests in the last 12 months, and visiting family doctors, private and public institutions, specialists and emergency services were compared between these two years periods. There was also a very important indicator; home care. As home care services had become common during last years in Turkey, and more elderly began to use this service commonly.

2. MATERIALS AND METHODS

Data collection: In this study, data from TurkStat (Turkish Statistics Institute) health surveys have been used. These surveys are being done biennially. When this study was interpreted, reports of 2012-2014 weren't reported so we used last two published surveys. General purpose of TurkStat's health surveys is to introduce the health profile of individuals and to get information about health indicators, which shows the degree of development of the countries. Address frame used in the sampling of the survey was the "National Address Database". Data were collected by face to face method from the sample household addresses. Information was obtained with the different questionnaires related with general health status, chronic diseases, functional abilities in carrying out daily activities, personal care, using of healthcare services, using of medicines, etc. for the individuals in 15 years and old age group. As data used in the study was not published, some of them, especially regarding elderly was taken with formal permission from the Institute.

Statistical Analysis: In order to find health services utilization levels some health-related indicators were used. These indicators were blood pressure, cholesterol test, blood sugar test, gaita tests and other medical laboratory tests (bilirubin, allergy, albumin, urine, hormone, vitamin, etc.). Also, mammography and prostate controls were included. Conducting these tests in the last 12 months and visiting private and public institutions, family doctors, specialists and emergency services were taken into account in order to find utilization of health services by the elderly. Home care was also a very important health service. We used SPSS 21.0 for evaluating the results. In order to find statistical significances chi-square test and z test-for proportions were used.

3. RESULTS

The study included 1789 participants for year 2008-2010 and 3396 for 2010-2012. Only participants older than 65 were used. Table 1 provides data on the socio-demographic characteristics of elderly for two periods.

Percentages of delivering measurement of blood pressure, cholesterol, blood sugar, gaita tests, and medical laboratory tests (bilirubin, allergy, albumin, urine, hormone, vitamin, etc.) by the elderly can be seen on Table 2. Also, percentages of mammography and prostate controls are included. Besides delivering these tests during last 12 months, Table 2 provides data about percentages of visiting family doctors, private and public institutions, specialists, emergency services and home care services. Chi-square and z test-for proportions was performed in order to investigate differences of two periods with regard to health services. We determined a significance level of $p < 0.05$ while interpreting statistical tests.

Table 1. Socio-demographic characteristics of elderly

| | | 2008-2010 | | 2010-2012 | |
|------------------------|--------------------|-----------|------|-----------|------|
| | | N | % | N | % |
| Age | 65-75 | 1115 | 62.0 | 2116 | 62.3 |
| | 75+ | 683 | 38.0 | 1280 | 37.7 |
| Gender | Female | 957 | 53.2 | 1891 | 55.7 |
| | Male | 841 | 46.8 | 1505 | 44.3 |
| Residence | Urban | 1038 | 57.7 | 1957 | 57.6 |
| | Rural | 760 | 42.3 | 1439 | 42.4 |
| Marital Status | No Marriage | 7 | 0.4 | 41 | 1.2 |
| | Widow | 626 | 34.8 | 1220 | 35.9 |
| | Married | 1165 | 64.8 | 2135 | 64.9 |
| Working Status | Working | 216 | 12.0 | 240 | 7.1 |
| | Not Working | 1582 | 88.0 | 3156 | 92.6 |
| Education Status | Primary School | 1595 | 88.7 | 2959 | 87.0 |
| | High School | 139 | 7.7 | 274 | 8.0 |
| | University | 64 | 3.6 | 163 | 5.0 |
| | GSS* | 1434 | 81.0 | 2797 | 83.0 |
| Social Security Status | GSS** | 238 | 13.0 | 418 | 12.0 |
| | Private Insurance | 15 | 0.0 | 34 | 1.0 |
| Income Status | By Himself/herself | 111 | 6.0 | 147 | 4.0 |
| | -500 TL | 524 | 29.1 | 608 | 17.8 |
| | 500-900 TL | 682 | 37.8 | 1273 | 37.5 |
| | 900-2300 TL | 483 | 26.8 | 1155 | 34.1 |
| | 2300+ | 109 | 6.0 | 360 | 10.6 |
| Total | | 1798 | 100 | 3396 | 100 |

* Public Institution, Retired Civil Servant, SII, Bagkur.

** Included Green Card.

Table 2. Percentage of elders delivering some kind of healthcare services during the last 12 months

| | 2008-2010 (N=1798) | | 2010-2012 (N=3396) | | χ^2 | p | z | p |
|---------------------------------|-----------------------|--------|-----------------------|--------|----------|-------|---------|-------|
| | n | % | n | % | | | | |
| Delivering Blood pressure test | 1376 | 76.529 | 2710 | 79.797 | 5.576 | 0.018 | -2.3723 | <0.05 |
| Delivering Cholesterol test | 979 | 54.449 | 2038 | 60.011 | 13.133 | 0.000 | -2.8874 | <0.05 |
| Delivering Blood sugar test | 977 | 54.338 | 2091 | 61.572 | 21.724 | 0.000 | -3.7756 | <0.05 |
| Delivering Gaita test | 96 | 05.339 | 294 | 8.6572 | 1.229 | 0.268 | -1.1764 | >0.05 |
| Delivering Other Med Lab. Tests | 980 | 54.505 | 1640 | 48.292 | 20.081 | 0.000 | 3.086 | <0.05 |
| Delivering Radiology service | 624 | 34.705 | 1355 | 39.899 | 12.288 | 0.000 | -2.351 | <0.05 |
| Delivering Mammography test | 66 | 03.670 | 132 | 03.886 | 0.119 | 0.730 | -0.075 | >0.05 |
| Delivering Prostate test | 174 | 09.677 | 278 | 08.186 | 3.540 | 0.060 | -0.536 | >0.05 |
| Visiting Family Doctors | 373 | 20.745 | 2391 | 70.406 | 1152.591 | 0.000 | -21.613 | <0.05 |
| Visiting Specialists | 1750 | 97.330 | 3286 | 96.760 | 0.090 | 0.630 | 1.153 | >0.05 |
| Visiting Emergency Services | 313 | 17.408 | 717 | 21.113 | 3.307 | 0.069 | -1.408 | >0.05 |
| Delivering Home care Services | 60 | 03.337 | 189 | 05.565 | 12.476 | 0.000 | -0.780 | >0.05 |

After computing Chi-Square test and z test-for proportions we found that there was a meaningful increase in visiting family doctors in the two periods ($X^2=1152.591$, $p < 0.001$; $z=-21.613$, $p < 0.05$). According to Chi-Square test there was a significant difference in home care services rendered by nurses and other health workers in the two review years ($X^2=12.476$, $p < 0.01$), but it wasn't significant according to z test ($z=-0.780$, $p > 0.05$). Although increasing ratios can be seen on Table 2 with regards to all kinds of healthcare services, statistical significance has been found according to delivering some tests like blood pressure ($X^2=5.576$, $p < 0.05$; $z=-2.372$, $p < 0.05$), cholesterol ($X^2=13.133$, $p < 0.001$, $z=-2.887$, $p < 0.01$), blood sugar ($X^2= 21.724$, $p < 0.001$; $z=-3.77$, $p < 0.05$) and other medical laboratory tests ($X^2=20.081$, $p < 0.001$; $z=3.086$, $p < 0.05$). Additionally increase in delivering radiology tests ($X^2= 12.288$, $p < 0.001$, $z=-2.235$, $p < 0.01$) were significant. Any significance was found according to utilization of other health services during two periods.

In order to compare the two years periods in relation to patient satisfaction of health services, we used data of TurkStat health research surveys as shown on Table 3.

Table 3. Percentage of satisfaction levels of the elders from health institutions

| | 2008-2010 | | 2010-2012 | |
|------------------------------------|----------------|--------------------------|----------------|--------------------------|
| | Good/Very Good | Not Good / Bad / Neutral | Good/Very Good | Not Good / Bad / Neutral |
| Health Centers and MCH/FP Centers* | 80.4 | 19.6 | 83.4 | 16.6 |
| Public Hospitals | 80.8 | 19.2 | 80.2 | 19.8 |
| Private Health Institutions | 68.8 | 31.2 | 74.7 | 25.3 |
| Homecare Services | 19.6 | 80.4 | 45.7 | 54.3 |
| Family Doctors | 71.5 | 28.5 | 83.0 | 17.0 |

*Maternal and Child health Centers and Family Planning Services

As can be seen from Table 3, there is remarkable increase in satisfaction of health services with regards to Private health institutions, home care services and family doctors. This is compatible with our results about utilization of healthcare services by elderly.

4. DISCUSSION

In our study, we evaluated both utilization of health services and satisfaction from them by the elderly in 2008 and 2012 in Turkey. Based on outcomes of this study, it is observed that there was a meaningful increase in visiting family doctors and using homecare services rendered by nurses and other health workers in these two periods. Among all kinds of healthcare services, statistical significance has been found according to delivering some tests like blood pressure, cholesterol, sugar and other laboratory tests. Additionally increase in delivering radiology tests and prostate tests were significant. Any significance was found according to utilization of other health services during two periods.

A remarkable increase in this study is that; visiting family doctors increased from 20% in 2010 to 71% at the end of 2012. This is in congruent with a study among Finnish elderly (10). In the newly evolving approach, the concept of "basic healthcare services" is used to mean the services involving preventive health care, in which family medicine assume the key role (11), so Turkish Ministry of Health has focused on this health service seriously during last years.

In our country Family Medicine is accessible to all citizens especially the elderly. Every patient has a family doctor near his/her home. In the last six years Family Medicine became more popular and this is why its utilization became two times of previous two years. Also satisfaction and utilization of home care services have increased in the same period. This finding is in agreement with those in the literature, which indicates the importance of home care services by the elderly (12-14). In a previous study it is said that "Because of the growing number of home care clients and concerns over rising costs, it is likely that social workers in hospitals, nursing homes and community based agencies are increasingly required to screen and assess clients for home healthcare referrals" (14). In order to assist elders and their family care givers, home health services requires professional assessment and teaching, skilled treatments and support services (15). When focused on maximizing utilization of homecare services healthcare service givers must pay attention to elder service awareness, low income, education and elders living alone (13). Some factors like awareness of preventive health care services, not having spouse, living alone, existence of chronic diseases, etc. increase utilization of home care services (12). Additionally, it has become obligatory to give home care services to all health institutions during the last years in our country. Also government's financial and other relevant supports to patients' families have increased utilization of it. These right policies of the government encouraged elderly to use this service the more.

When we look at satisfaction level of elders from health institutes, there is an important increase in services rendered by family doctors and home care services. These results are compatible with our other findings. The aforementioned reasons could be said for this increase in satisfaction. This finding is compatible with some previous studies (14-17). In a previous study it is said that "When professionals are acquainted with aged individuals in the community and are aware of the determining factors of their health care service use, they can more appropriately address the multiple interfaces, peculiarities, and differences in this patient population. This understanding can improve care management practices for aged individuals to preserve their independence. The health care services that are provided to the aged population should be priority actions in the public policies that are aimed at this population" (18).

5. CONCLUSION

Being old is inevitable for all of human beings. Elders' life satisfaction comes from their health satisfaction, which in turn comes from efficient utilization of health services. As it has been seen from our finding right policies executed by governments lead to improvements in patient's attitude to access healthcare. This is especially visible when we look at government's policies about family medicine and homecare services. We hope that public health and health planning researchers and decision-makers will benefit from these findings in order to provide a more healthier and happier life for their elder citizens.

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