REPUBLIC OF TURKEY
MINISTRY OF HEALTH
Turkish Public Health Institution

TURKEY HEALTHY AGING ACTION PLAN AND IMPLEMENTATION PROGRAM 2015-2020

ANKARA 2015

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PREFACE

In this century, improvement in the environmental conditions and in level and distribution of incomes, developments in science and technology, betterment in dwelling conditions, augmented accessibility to hygiene and healthcare services, and acquisition of healthy living conditions have positively contributed to lifespan and quality of life of individuals, and the process has further accelerated through globalization in many countries. This situation leads to increase in elderly population and aging of the societies in developed countries.

We need to note that aging is a process that actually starts with birth. As the people become older, they gradually become dependent to others in material or moral point of view due to multiple factors, such as chronic degenerations, diseases, and changes in social status.

In order to provide accessible, effective and appropriate health care service for individuals and community and to better respond to the people with special needs due to their physical, social or economic conditions by rendering this service easily accessible for them, we have prepared an "Turkey Healthy Aging Action Plan and Implementation Program 2015-2020" aimed to improve health care of elderly and our efforts will continue to increase in this manner.

The bedridden individuals of all ages in need of home care and rehabilitation are served at their homes by home care service units of our public hospitals and primary health care institutions. Improvement of health tourism services intended for the elderly who need rehabilitation service is among our most important policies.

Elderly are our most important assets that build a bridge between yesterday and today and allow us to move our culture and values into the future. It is our debt of gratitude that the old age is respected at the same time. I'd like to thank to everyone, especially the Turkish Public Health Institution, for this study that will make contribution to health policy strategies which will be performed in order for elderly to take part in social life and integrate with society and feel the happiness of living.

I wish our elderly to continue better and healthier mentally and physically quality of life.

Dr. Mehmet MÜEZZİNOĞLU
Minister of Health

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ABBREVIATIONS

ABPRS	Address Based Population Registration System
ADL	Activities of Daily Living
APS	Adult Protective Services
BHSM	Basic Health Statistics Module
CDC	Centre for Disease Control and Prevention
CGA	Comprehensive Geriatric Assessment
CHA	Communiqué of Health Application
COPD	Chronic Obstructive Pulmonary Disease
Dep.	Department of
DPT	State Planning Organization
EAMA	European Academy for Medicine of Aging
EKMUD	Infectious Diseases and Clinical Microbiology Specialist Association of Turkey
ESPEN	European Society for Clinical Nutrition and Metabolism
EUGMS	European Union Geriatric Medicine Society
FPIS	Family Physicians Information System
GATA	Gülhane Military Medical Academy
GDS	Geriatric Depression Scale
HALE	Healthy Adjusted Life Expectancy
HASUDER	Association of Public Health Specialist
ICF	International Classification of Functioning, Disability and Health
LE	Life Expectancy at Birth
MMT	Mini Mental Test
MNA	Mini Nutritional Assessment
NGO	Non-Governmental Organization

RHTS	Remote Health Training System
SGK	Social Security Institution
TNHS	Turkey Nutrition and Health Survey
TRT	Turkish Radio and Television Corporation
TSE	Turkish Standards Institute
TUIK	Turkish Statistical Institute
UN	United Nations
USA	United States of America
WHO	World Health Organization
WONCA EUROPE	World Organization of National Colleges Academies- EUROPE
YOK	Higher Education Council

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INTRODUCTION

Among the others, aging population is one of the most prominent demographical phenomenon in the 21st century. People enjoy a longer lifetime; birth rates decrease and thus the aged population increases in the world. Being more apparent in developed countries, the fact of aging gets more and more important for developing countries as well and Turkey is not an exception. Aging of population affects all aspects of the society ranging from the healthcare to social insurance, education, employment opportunities and family life. The recent researches indicate transition into a new demographical structure in the country. Rate of population older than 65 was 7,5 percent in year 2012 and it is estimated that the rate will increase to 10,2 percent by 2023, 20,8 percent by 2050 and 27,7 percent by 2075 (1). Whereas the population older than 65 was 5,7 million in 2012, the projections of Turkish Statistical Institute (aka TUIK) estimate that population older than 65 will be 8,6 million by 2023, 19,5 million by 2050 and 24,7 million by 2075 (2).

Life expectancy at birth gradually increases in Turkey. According to 2013 statistics of the World Health Organization (WHO), the life expectancy at birth that was 66 years in 1990 increased to 76 years in 2011. Life expectancy at birth is 73 and 78 years for males and females respectively (3). According to TUIK statistics, the average life expectancy at birth for both genders was 74,6 years for 2010 and it is projected that average life expectancy at birth to be 78,5 years by 2050. On the other hand, life expectancy at birth was estimated 74,7 years for males and 79,2 years for females for 2013 while it is estimated to be 75,8 years for males and 80,2 years for females by 2023 (4).

The WHO defines health as a state of complete physical, mental and social well-being (5). The quality of the life should be improved in line with the extension in life expectancy at birth. Holistic health definition requires addressing improvement of both expected lifetime and life quality concepts.

Successful aging does not only refer to a state of physical well-being, but it also refers to a complete state of wellbeing for physical, psychological, and social aspects as well. Life span, biological and mental health, cognitive adequacy, social adequacy and productivity, individual control and joy of life are commonly basic indicators of successful aging in literature (6).

In this context, successful aging refers to maintaining personal social environment and relations vivid during individual process of preparation for old age, taking protective measure to minimize the health problems, striving to improve memory and physical functions and having a positive understanding of life (7).

Aiming to meet healthcare needs and expectations of the individuals with an anthropocentric and holistic approach, studies for development of healthcare services for people with special needs are progressing.

GENERAL PRINCIPLES

Turkey Healthy Aging Action Plan aims to offer accessible, convenient, effective and active healthcare services to the individuals and society and to meet the needs of the people with special needs due to physical, mental, social or economic circumstances by providing them easier access to favourable healthcare services. Action plan sets priorities of the objectives and strategies and basic framework for the supportive studies to be conducted with participating authorities and organizations.

VISION

The vision of this action plan is to ensure people maintain their health status and functional capabilities and enjoy wellbeing by living in dignity through seeing the aging in the society as an opportunity rather than a threat risk.

MISSION

The mission is to support combat against non-communicable diseases and chronical conditions with the aim of improving the healthcare services offered to aged individuals within scope of practices of Ministry of Health; to improve health level of the society and to develop, implement, monitor and assess the policies on healthy aging.

Improvement in environmental conditions during the process started with industrial revolution, increase educational level, developments in income level and its distribution, improvements in balanced and sufficient dietary, betterment in dwelling conditions, availability and accessibility of the healthcare services, decrease in infant and child deaths, decrease in prevalence of infectious diseases, gaining healthy habits and developments in science and technology have positive contributions for life span and quality of life of the individuals. Globalization speeds this process up further in many countries and it contributes to increase of aged population in developed countries.

Sustainable policies should be developed for the aged people to promote healthier and active aging individuals; measures should be taken in health and social security systems to take the demographical changes in the population seriously, and education and employment policies should comply with this change accordingly.

In parallel and similar to the goals defined in 2012- 2020 Strategy and Action Plan for Healthy Aging in Europe developed by World Health Organization European Region, this Action Plan herein aims to realize national goals and strategies to improve responsiveness of the healthcare system in accordance with the increase in aging population in our country.

For the successful implementation of the action plan, it is highlighted that;

- Arrangement and evaluation of successful policies aimed at the elderly by making a good start or arrangements,
- Implementation of healthy aging strategies at the level of individual and community with the contribution of volunteers,
- Elimination of inequalities in health will contribute to the lifelong health approach,
- Gender-focused approach will be of great importance for ensuring the proper services to the needs of elderly women and men,
- Necessity for intersectoral collaborations and for the health approach with the contribution of public institutions, private institutions and non-governmental organizations,
- Ensuring the financial sustainability by strengthening transformation program in old age and the public health practices for the elderly.

HEALTHY AGING ACTION PLAN STRATEGIES

Strategy 1-Improvement of Lifelong Health and Healthy Aging

Old Age is one of the periods in which the quality of life decreases. Many priorities can be listed for the old age. In these evaluations, it should not be forgotten that aging is a process that starts with birth. When individuals are born, they start to live fully dependent on somebody else in terms of material and spiritual sense; but after years, they can be fully independent. Adulthood refers to a period in which individuals manage to survive alone. Over the course of life, with the effects of such multiple factors as diseases, chronic degeneration, change in social status, individuals start to be dependent on another person in material and spiritual terms.

Unless the necessary measures are taken, the last period of life can reach a stage at which we are totally dependent on the others as happened at birth (Figure 1). Therefore, one of the purpose of the studies conducted in the field of healthy aging is to prolong lifespan which is passed independently, reduce the dependency in later years of life as far as possible or to postpone this further on.

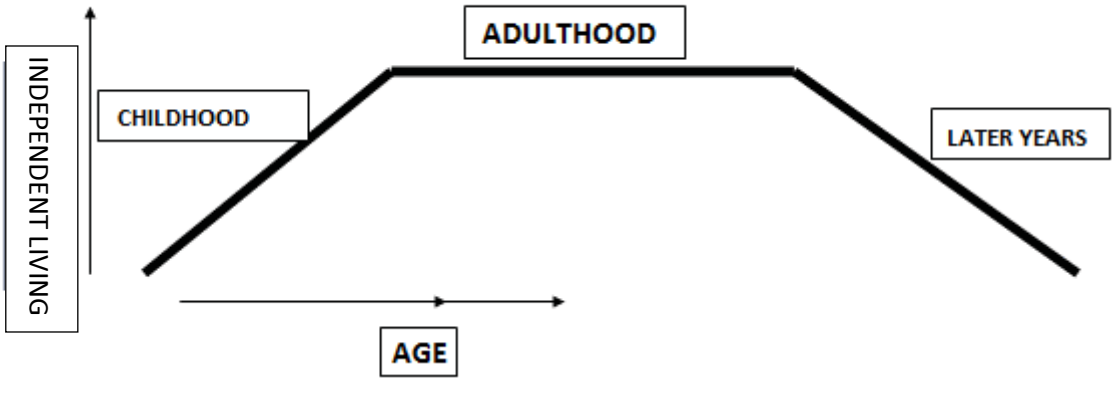


Figure 1. Relation Between Age and Independent Living

Lifestyle and habits of individuals in childhood and adulthood periods are important markers that determine the health status in later years. Since healthy aging is a process that begins at birth, the studies of health aging should be oriented towards this goal.

The fundamental issue is to raise awareness of the development of lifelong health both in society and in health care providers.

This issue was drawn attention at Madrid II. Aging Assembly, and the collaboration necessity in heathy aging has been emphasized in all relevant activities by the health authorities, academics, non-governmental organizations and local authorities (8).

Strategy 2- Protection of Society Against Health-Oriented Risks

Ageing is an unavoidable process with biological, chronological, social aspects and issues which is experienced by every individual.

The importance of aging is multidimensional in terms of health. The reasons for the problems in old age are the declines and inadequacies in physiological and psychological functions that come along with old age. Chronic health problems occur in elderly people as a result of these inadequacies. In our country, 90 percent of the people who are 65 and older are estimated to have 1, 35 percent 2, 23 percent 3, 15 percent 4 chronic health problems (9).

Today, the policies and programs related to old age have focused on increasing quality of life and general health. To remain healthy until later years, the fight against non-communicable diseases should be conducted in an active way. Improvement of successful health policies and continuity of social services will only be possible with the conduct of the fight against non-communicable diseases.

It is ensured that elderly can maintain their biological and mental health, perform such basic elements as cognitive competence, social competence, productivity and enjoyment of life and live an active and independent life. Active life is a condition indicating a complete of wellbeing in terms of psychological and social aspects.

Strategy 3- Improvement of Health Care Services for Elderly and Provision of Full Access to Health Care Services

In general, it has been aimed that elderly health and active aging program is provided in the primary health care. These centres that directly provide health care services for elderly include such developed implementations as being easily accessible, positive discrimination and provision of efficient health care services for elderly.

Studies show that elderly naturally benefit from health care services more than do younger population. Due to the problems arising from the extension of lifespan, the tendencies in health criteria should be recognized. Sources are recommended to be used effectively by evaluating these trends. Especially, it is important to determine the tendencies in causes of death of elderly, disease and functional impairment criteria, healthy aging factors and disease costs.

That provision of health care services for elderly is easily accessible, geriatric services are provided by trained health care teams, and waiting duration is minimized should be evaluated along with the needs of the social dimensions. Family physicians should provide coordination with the health care professionals serving in secondary and tertiary health care services. An efficient geriatric service should be performed with a multidisciplinary approach by an interdisciplinary team. This issue should be highlighted in the basic trainings of primary health care physicians.

It is inevitable that developing countries are in a dilemma to struggle to overcome the demographic changes in their populations on the one hand (while trying to finding a solution to the needs of the young population, who have relatively the most share, to develop and implement the policies for the elderly population who have been increasing over the course of time), and to find solutions to the development of the country and improvement of the prosperity on the other hand. This needs a consistent population policy and sustainable investment in human capital.

It is planned to revive the policies which have been determined with the divergent needs of the elderly in the changing society and to provide the development of new projects through the strategies.

Strategy 4- Reinforcement of Monitoring and Evaluation

The evidence-based information should be relied on the implementation of successful of health reforms and the evaluation of success of the policies. The data should be evaluated in order to determine the intervention areas aimed at protecting elderly health, increasing the quality of health care provision for elderly and reinforcing the integration with social services. Statistical evidence should be evaluated in the guidance of policy and the good practices in our country should be shared internationally.

PRIORITY INTERVENTION APPROACHES

Aging is a normal process in which an increase in the frequency of acute and chronic diseases is observed to occur and physiological changes are expected to take place with the progression of age. Priority intervention approaches have been determined with the purpose of maintaining lifelong health and protecting from risks against health, improving the health care services provided for the elderly people.

- **First Priority Intervention:** Improvement of Exercise, Physical Activity and Rehabilitation Services for Elderly
- **Second Priority Intervention:** Improvement of Home Health Care Service for Elderly
- **Third Priority Intervention:** Planning and Implementation of Activities about Neuropsychiatric Diseases, Abuse, Violence and Disability in Old Age
- **Fourth Priority Intervention:** Provision of Appropriate and Effective Practice of Diagnosis, Treatment, Monitoring Services in Old Age
- **Fifth Priority Intervention:** Arrangement of Training of Health Care Professionals and Health Care Providers

First Priority Intervention: Improvement of Exercise, Physical Activity and Rehabilitation Services for Old Aged People

Active and independent living of individuals should be encouraged with the purpose of maintaining the lifelong health. Exercise and physical activity are of great importance for active life. Today, physical activity and exercise are given a great place in the health policies of many countries across the world.

Physical capacity of persons decreases with age, which limits the functional independence of the elderly (10). According to the Centre for Disease Control and Prevention (CDC), chronic diseases significantly limit the activities of daily living for 39 percent of the people who are 65 and older (11). 11,5 percent of the elderly between 65 and 79 need assistance in such activities as moving, bathing, dressing, toileting and eating. Osteoarthritis and other rheumatic diseases are seen in 50 percent of the age group 65 years and above. In addition, such chronic diseases as sensory loss, heart disease, fractures, hypertension, diabetes, and cancer are also affecting their daily life (12).

Neuro-cognitive disorders such as auditory-visual and sensory-cognitive disorders, heart diseases, cancer, hip fractures and dementia are common in the elderly. Joint pain and falls are among the most common problems. The pain is demonstrated through acute or chronic pain. Control is very difficult and these are not often shown to correlate with objective findings. Stress and anxiety lead to muscle spasm, consequently bringing about decreased activity; which reversibly cause a vicious circle.

Fall, is not part of the normal aging process; but it forms the basis of muscle-skeletal and neurological system disorders associated with aging, and loss of physical function, overuse medication called polypharmacy and environmental hazards in connection with these. Lack of good health, inadequacy in exercise and decreased mobility due to lack of activity or chronic disease, imbalance and earlier falls are important risk factors for the stories of falls.

Regular activity and exercise habits of the elderly are the most important determinants of healthy aging in the short and long term. Especially, in order to prevent the incidence of the disease seen in the elderly, exercise is important. In addition to these, physical exercise has a social and psychological aspects that positively affect the quality of life and well-being of older people.

Second Priority Intervention: Improvement of Home Health Care Service for Elderly

According to the United Nations (UN) report of 2010; Individuals aged 65 and above account for about 11 percent of the world's population, and this percentage is estimated to rise to 26 percent by 2050. Given these figures, 400 million elderly people are expected to live in developed countries and more than 1,5 billion are expected to live in less developed countries (13). The WHO statistics of 2013 show that the rate of the population over 60 years of age surpasses 20 percent of the total population in 21 European countries (3).

In our country, this situation is parallel to the reality of the world. The demographic transition process in Turkey will be realized in a much shorter period compared with European countries. With the falling in fertility rate and the increase in life expectancy, Turkey will no longer be a country with a young population.

Both the number of the people over 65 years of age and their shares in the total population will increase at an extraordinary rate in the next 20-30 years. Moreover, demographic transition process in our country will be realized in a much shorter period compared with European countries. With the falling in fertility rate and the increase in life expectancy, Turkey will no longer be a country with a young population. While the rate of the elderly people in the total population was 7,5 percent in 2012, it is estimated to increase to 20,8 percent by 2050, which verifies the defined table (1).

As a result of the increase in the aging population, health expenditure and care requirements have swiftly increased, and this increase, as well as becoming a noteworthy situation, has posed a serious threat to all of the countries, including the ones having an extremely powerful social security system, for the future. In parallel to the increase in the elderly population, the burden of chronic diseases on the total health expenditures is gradually increasing.

As a result of aging, the increase in population of the people with disabilities and in the degree of the existing disabilities as well as chronic diseases has been observed. Given all these factors, a significant increase in the needs of the elderly for health and social care has been seen and this need is known to show further increase in the future.

In order to meet the long-term care, all of these countries should make future strategies and develop care models based on the demographic information and numerical predictions. While studies are being conducted to ensure the effective operation of the system in the developed countries, the models which are appropriate to realities should be immediately implemented in the countries which do not yet have a model in this regard. Home care is the most effective model in meeting the health, and social care needs across the world.

Home care models vary from country to country due to socio-economic structures, differences in social security systems, health and social service models and cultural changes in the countries. Home care services that have been created in line with the country needs and opportunities are seen to be integrated to the health and social services as well as social security system.

While developing a model for our country, it is important to adopt the remarkable parts of the different models that fit with the conditions of our country and to take the common practices that are usually observed in different models rather than to take a single model from the examples in the world. In our country, it is necessary to continue the home care applications with the integration of home care services and social service provisions.

Third Priority Intervention: Planning and Implementation of Activities about Neuropsychiatric Diseases, Abuse, Violence and Disability in Old Age

The elderly have been experiencing difficulties due to health problems as well as social and economic problems. They have difficulty in maintaining their lives in society due to disabilities in connection with these problems. Neuropsychiatric disorders have an importance place among the health problems experienced by the elderly. Depression experienced by the elderly in treatment and care environment is higher than the prevalence in society.

15 percent of the patients who consults a doctor for various reasons and 25 percent of the patients who stays in nursing homes are assessed to have depression (14). In the studies conducted in our country, the prevalence of major depression of the people over 65 years of age is determined to be 6 percent, the prevalence of depressive symptoms to be 11 percent (15).

When elderly psychosis, mood disorders, somatization, anxiety disorders are added to this, psychiatric illnesses can be seen to exist more frequently. Particularly, depression is one of the ten most common diseases that cause disability and early death (16). As one of the most common psychiatric illnesses, depression is a major health problem owing to the fact that it reduces the quality of life, increases health spending, worsens the prognosis of cardiovascular disease, especially chronic internal disease with increased risk of suicide.

Suicide can be a seen as a reasonable "way out" for physical illnesses in the elderly and for the end-stage patients, especially the cancer patients. This is frequently associated with depression and this situation may increase the suicide risk (17).

Dementia is a common problem in the elderly. Its incidence is 5 percent in over 65 years of age and 50 percent in over 80 years of age. Since the disease can start with an insidious forgetfulness, forgetfulness in old age cannot be seen as normal. Today, with the existing medications, the duration of going to the last point in the cases diagnosed in early stages can be extended, patient's self-care time can be extended and caregiver burden can be reduced (18).

As of 2010, when looked at the incidence of dementia; 4,6 percent of the total population in Asia, 6,2 percent in Europe, 6,1 percent in Latin America, 6,9 percent in North America and 4,7 percent of the population worldwide are stated to have dementia. When the countries having the patients with dementia are listed, China is ranked in the first place with 5,4 million patients, the USA with 3,9 million, India with 3,7 million, Japan with 2,5 million, Germany with 1,2 million, Russia with 1,1 million, France and Italy with 1 million each, followed by Brazil with 1 million patients. As of 2010, the cost of dementia for the whole world is stated to be 604 billion US dollars and 89 percent of this cost is covered by the developed countries (19). When the problems of the health care providing families, persons and institutions are added to this table, the importance of the elderly mental health and the development of the relevant service plans and policies should be taken into account once again.

Fourth Priority Intervention: Provision of Appropriate and Effective Practice of Diagnosis, Treatment, Monitoring Services in Old Age

With the effect of rapid-evolving technology and the increasing number of scientific studies, the important advances has been recorded in health care services. Accordingly, the development of diagnosis and treatment methods, advances in preventive and curative health care services, and support of the studies aimed at increasing and adopting the quality of life, the average lifespan has been extended and the elderly population in the total population has increased.

Diagnosing precisely with geriatric assessment, developing medical treatment, ensuring the long-term care plans, improving the functional status, increasing quality of life, and determining the basic features, background of patient and results of the treatment should be required.

When comprehensive geriatric assessment is periodically performed, the rate of mortality and placement of patients in nursing homes are identified to reduce and the functional status are identified to positively develop.

Fifth Priority Intervention: Arrangement of Training of Health Care Professionals and Health Care Providers

The elderly population is growing in our country as well as in the world, the elderly population in western countries constitute 15 percent of the total population. However, this section of 15 percent consumes more than 50 percent of hospital admissions and 40 percent of health sources (20).

In parallel with the growing elderly population, in addition to the need for the institutions and organizations providing the service to the elderly, qualified staff that provide services to the elderly are also required. The training of the qualified staff in the subjects of services to be provided and elderly health are becoming important.

In the world, the training and education of the staff providing healthcare services to the elderly are given importance and the health problems that may be created by the elderly are tried to be reduced. The works have been performed for the provision of the geriatric patients approach in Europe and the US by both preventive medicine services and the specialized physicians as well as for the placement of geriatrics training in the specialized branches.

Above all, that the subjects of lifelong health and aging should be put in the curricula beginning from the primary schools will be the first step for making the society conscious of this issue.

SUPPORTIVE INTERVENTIONS

The population over 65 years of age accounts for approximately 7,5 percent of the total population of Turkey. The elderly population in the total population is estimated to be over 20 percent by 2050 (1). It is seen that the population of Turkey is getting older and services and policies towards the elderly care should be planned and implemented urgently.

While the improvement and development works of services towards the long-term care needs are performed in our country, the alternative services that will support the increase of the efficiency and the quality of the services and reduce the intense demand for care to a certain extent should be carried out simultaneously. At this point, the understanding of long-term care services, especially in the US, England, Canada and Germany and review of alternative services will be beneficial.

Supportive interventions that have been identified for the sustainability of healthy aging and health;

First Supportive Intervention: Provision of Sufficient Nutrition and Access to Food Product for the Elderly

Second Supportive Intervention: Improvement of Home Care Services

Third Supportive Intervention: Cooperation with Partner Organizations to Ensure Full Access to Health Care Services

First Supportive Intervention: Provision of Sufficient Nutrition and Access to Food Product for the Elderly

Among the factors that negatively affect nutritional status in the elderly, such factors as physiological changes, acute and chronic diseases, oral health problems, polypharmacy, economic problems, incapable of single-handedly shopping and preparing meals and eating take an important place.

Insufficient and unbalanced nutrition plays an important role in the formation and in the course of such diseases as obesity, cardiovascular diseases, cancer, diabetes and osteoporosis which have high morbidity and mortality rates in the elderly. Especially malnutrition is a major cause of morbidity and mortality in the elderly.

Obesity resulting from unhealthy nutrition leads the formation of nutrition-related chronic diseases (cardiovascular diseases, cancer, diabetes, osteoporosis, etc.). It is recommended that personal nutrition and physical activity programs should be developed and the lifestyle changes should be provided in obese elderly.

Second Supportive Intervention: Improvement of Home Care Services

The main objective of home care services is to support the elderly or their families, to increase their functionality, to help them live independently and retain power as much as possible and to ensure their full well-being by meeting their needs in the best possible way within the framework of a sense of self-esteem of the elderly.

Home Care covers the services in the direction of;

- Household tasks (such as laundry, shopping, cleaning), preparing meals at home,
- Personal care (dressing, helping with bath and personal hygiene), personal emergency response (24 hour emergency service)
- Heavy-duty that cannot be performed by individuals alone,
- Transportation,
- Financial consultancy,
- Solutions to the problems within the framework of the speciality fields of professional persons that form the training and home care service teams.

Home care service is a lower cost service as well as having important benefits, such as covering the training of the whole family members, maintaining the social activities and hobbies and continuing the life in an environment to which individuals are accustomed.

Third Supportive Intervention: Cooperation with Partner Organizations to Ensure Full Access to Health Care Services

When home care service is evaluated, the persons which are very difficult to be regained to the society and the severely disabled persons needing medical care are the groups with first priority needs.

The increase of quality of care services towards the elderly and the individuals with severe disabilities and of the quality of life of individuals are of great importance. However, the adults with severe disability and the elderly are usually of minor importance in terms of care. These individuals, and especially their needs for care and assistance that increase with aging, is one of the issues that should be chiefly dealt with on the basis of the principle of the socials state.

With the purpose of the provision of a holistic health care service for the elderly, it is evident that the works are needed to ensure the collaboration with partner organizations for eliminating the deficiencies in the matters of institutional care services, developing training programs for the care service, making prevalent the productions of maintenance and rehabilitative support technologies according to international standards, determining the system actors and financing methods in the field of maintenance assurance model and nursing care insurance.

REFERENCES

1. TUIK. (2013). Retrieved: 03 February 2014, http://tuik.gov.tr/PreHaberBultenleri.do?id=13466
2. TUIK. (2013). Retrieved: 04 February 2014, http://www.tuik.gov.tr/PreHaberBultenleri.do?id=15844
3. WHO. World Health Statistics 2013. Geneva, World Health Organization.
4. TUIK, İstatistiklerle Yaşlılar [Elderly with Statistics]2012: Publication No: 3909, 2013. Ankara, Turkish Statistical Institute
5. WHO. Ottawa Charter for Health Promotion. Geneva, 1986, World Health Organization
6. Danış ZM. Yaşlıların Evde Bakım Gereksinimleri ve Evde Bakıma İlişkin Düşünceleri [Equirements for Home Care and Home Care Considerations Related to the elderly. Güç-Vak Publishing.] Ankara: Güç-Vak Yayıncılık, 2004:20.
7. Baran AG. Başarılı yaşlanma modellerinin sosyolojik analizi. İçinde: Kalınkara V, Akın G. V. Ulusal Yaşlılık Kongresi Kitabı. [Sociological analysis of models of successful aging. Inside: Kalınkara V, Akın G. V. National Ageing Congress Book]. Ankara: Gazi Kitabevi, 2007:236-45.
8. Political Declaration and Madrid International Plan of Action on Ageing. New York: United Nations; 2002. Retrieved: 06 Mart 2014. (http://undesadspd.org/Ageing/Resources/MadridInternationalPlanofActiononAgeing.aspx)
9. Aydın ZD. Yaşlanan dünya ve geriatri eğitimi [Aging World and Education of Geriatrics]. Turk J Geriatrics 1999; 2(4): 179-187.
10. Telatar TG, Özcebe H. Yaşlı nüfus ve yaşam kalitelerinin yükseltilmesi. Türk Geriatri Dergisi [Increasing Quality of Life of the Elderly Population. Turkish Geriatrics Journal]. 2004; 7: 162-5.
11. Fulmer T, Wallace M, Edelman CL. Older adult, In: Edelman CL, Mandle CL, (Eds). Health Promotion. Toronto: Mosby, 2002. pp: 709-44.
12. Fadıllıoğlu Ç. İleri Geriatri Hemşireliği. İçinde: Fadıllıoğlu Ç (Editör): Yaşlılığın Önemi [O. Advanced Geriatric Nursing. Inside: Fadıllıoğlu Ç. (Editor): The Importance of Old Age]. İzmir: Meta Basım, 2006. Pages:1–17.
13. United Nations (UN). World Population Prospects the 2010 Revision. Retrieved: 22 January 2014.http://www.un.org/en/development/desa/population/publications/pdf/trends/WPP2010/WPP2010_ Volume-II_Demographic-Profiles.pdf.
14. NIH Consensus Development Panel on Depression in Late Life: Diagnosis and treatment of depression in late life. JAMA 1992; 268(8):1018-1024
15. Uçku R. Küey L, Yaşlılarda depresyon epidemiyolojisi-yarıkentsel bir bölgede 65 yaş üzeri yaşlılarda kesitsel bir alan araştırması- Nöropsikiyatri Arşivi [Depression in the Elderly - cross-sectional area research on the elderly over 65 years of age in a semi-urban region- Archives of Neuropsychiatry]1992; 29:15-20

16. Murray CJL, Lopez AD. The global burden of disease: a comprehensive assessment of mortality and disability from diseases, injury and risk factors in 1990 projected to 2020. Geneva, World Bank, Word Health Organization and Harvard School of Public Health, 1996

17. Moscicki, E. K., Epidemiology of Suicide, North American Perspectives, International Psychogeriatrics, Vol: 7, No: 2, 1995, s. 137-148

18. Ministry of Health (Former) General Directorate of Primary Health Care: Yaşlı Sağlığı Modülleri: Eğitimciler İçin Eğitim Rehberi [Elderly Health Modules, Guideline for Educators], 2011, Ankara

19. WHO. Dementia a public Health Priority. 2012. Geneva, World Health Organization

20. Bernabei R, Carhonin PU: Medical Education. Lancet 1995; 345:1440.

TURKEY HEALTHY AGING IMPLEMENTATION PROGRAM 2015-2020

GENERAL INFORMATION

Aging is a universal and continuous process which causes a reduction in all functions seen in every living creature without privilege. The recent researches indicate transition into a new demographical structure in the country. In our country, the rate of population older than 65 was 7,5 percent in year 2012 and it is estimated that the rate will increase to 10,2 percent by 2023, 20,8 percent by 2050 and 27,7 percent by 2075 (1). With the increase in the elderly population, the diseases seen in the elderly are increasing in parallel. Solving the problems of the elderly people in one centre by allotting enough time has become a current issue due to such reasons as development of a variety of age-related physiological changes in the human body, varying of metabolism, effects and side-effects of drugs, different emergence and course of diseases, and this has also revealed the concept of geriatrics.

The WHO identifies the geriatric age group as the people older than 65 (2). Geriatrics is the science that deals with the health problems, diseases, social life, life quality, mood, cognitive problems of the people older than 65, preventive physicians' practices and aging in society. In comprehensive geriatric assessment which means the versatile evaluation of the elderly patients, the evaluation of physical, psycho-social and environmental factors affecting the elderly patient and the functionality and medical evaluation of the patient are made together.

The increase in the elderly population brings along the special needs for the elderly. In our country which are getting older, preventive physician's practices, immunization of patients, revealing the problems, especially the geriatric syndromes, that might remain confidential, safeguarding environmental-social support are the issues that should be taken into consideration in order to ensure the implementation of the elderly health care plan, increase the quality of life and continue their independency. The quality of life of the elderly can be increased by means of easy and free access of the elderly to health care services, early diagnosis and treatment of diseases, and health care services to be provided in this manner and the measures to be taken at the proper time.

Evaluation of the elderly in a comprehensive manner in hospital, outpatient clinic, nursing home, retirement home, long-term nursing home and at their homes within a home team concept reduces the hospitalization, mortality, functional dependency, household and non-household accidents, applications to hospital and nursing home and care costs and ensures health and welfare of patients by improving the life quality.

Nowadays, due to the decrease in the birth rate and the extension of life expectancy especially in the developed countries, the increase in aging and the associated problems have become inevitable. The number and the rate of the people older than 65 in the total population will rapidly increase in the next 20-30 years. Furthermore, the demographic transition process in Turkey will be realized in a much shorter period compared with European countries. With the falling in fertility rate and the increase in life expectancy, Turkey will no longer be a country with a young population.

According to the United Nations (UN) report of 2010; Individuals aged 65 and above account for about 11 percent of the world's population, and this percentage is estimated to rise to 26 percent by 2050. Given these figures, 400 million elderly people are expected to live in developed countries and more than 1.5 billion people are expected to live in less developed countries (3). The WHO statistics of 2013 show

that the rate of the population over 60 years of age surpasses 20 percent of the total population in 21 European countries (4).

As a result of the increase in the aging population, health expenditure and care requirements have swiftly increased, and this increase has posed a serious threat to all of the countries including the ones having an extremely powerful social security system for the future as well as becoming a noteworthy situation. In parallel to the increase in the elderly population, the burden of chronic diseases on the total health expenditures is gradually increasing.

According to WHO data, the vast majority of world health expenditure is currently being spent on the treatment of chronic diseases, and 60 percent of deaths arises from chronic diseases (5).

As of 2013, the number of the people with diabetes around the world was 382 million, this number is expected to reach 471 million by 2035 (6).

According to the study of the Ministry of Health, there are 22 million people with chronic diseases in our country (7). On the other hand, considering that 12,29 percent of our population is comprised of the people with disabilities, how immense the care needs that will dramatically increase in the coming years has already emerged (8).

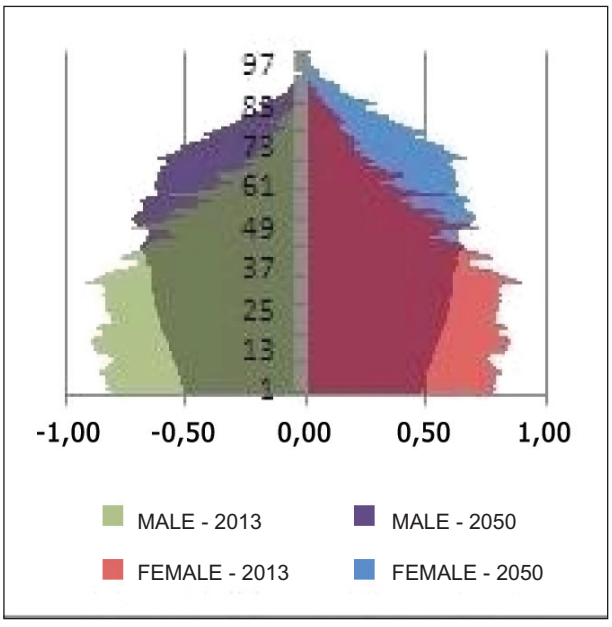
1. TARGETS AND STRATEGIES

1.1. IMPROVEMENT OF LIFELONG HEALTH and HEALTHY AGING

Current Situation in Turkey and the World

Prevention of infectious diseases, early diagnosis of disease and effective treatments are contributing to rapid increase in the average life expectancy. The share of the elderly population in society in parallel with the changes and transformations in the demographic structure is also increasing. In our country, the rate of population older than 65 was 7,5 percent in year 2012 and it is estimated that the rate will increase to 10,2 percent by 2023, 20,8 percent by 2050 and 27,7 percent by 2075. Whereas the population older than 65 was 5,7 million in 2012, the projections of Turkish Statistical Institute (aka TUIK) estimate that population older than 65 will be 8,6 million by 2023, 19,5 million by 2050 and 24,7 million by 2075 (9).

Population Pyramid, 2013-2050



Population Pyramid, 2013-2075

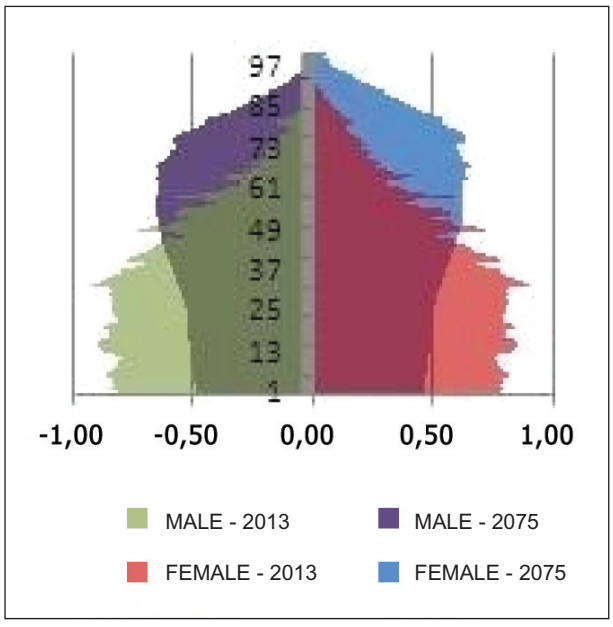


Figure 2. Population Pyramid 2013-2075

Source: TUIK.(2013). Population Projections, 2013-2075 Retrieved: 03 February 2014, http://www.tuik.gov.tr/PreHaberBultenleri.do?id=15844)

In addition to the prolongation of life expectancy, the increase in the quality of life should also be provided. In order to evaluate the quality of life in a healthy manner, the two key indicators should be considered together. One of these is Life Expectancy at Birth (LE), the other is Healthy Adjusted Life Expectancy (HALE).

According to the WHO data in Table 1, it is seen that the Life Expectancy at Birth (LE) increased in all the regions from 1990 to 2011, with the most increase in South-East Asia and the least increase in the European region.

Table 1. LE Values between 1990 and 2011 in the World Health Organization (WHO) Regions

COUNTRIES	LE	
	1990	2011
Africa	50	56
America	71	76
South-East Asia	59	67
Europe	72	76
Eastern Mediterranean	61	68
Western Pacific	70	76

(Source: World Health Statistics 2013. Geneva, World Health Organization, 2013. Retrieved: March 10, 2014, http://www.who.int/gho/publications/world_health_statistics/EN_WHS2013_Full.pdf?ua=1

In Table 2; according to WHO, the value of Healthy Adjusted Life Expectancy (HALE) is seen to be the lower in the African Region, the highest in Europe, America and the Western Pacific regions; HALE value is seen to be lower than LE values in all of the regions. That the difference between LE and HALE values means that the desired level cannot be captured in terms of life quality.

Table 2. HALE Value in 2007 in the World Health Organization (WHO) Regions

COUNTRIES	HALE (2007)
Africa	45
America	67
South-East Asia	57
Europe	67
Eastern Mediterranean	56
Western Pacific	67

(Source: World Health Statistics 2010. Geneva, World Health Organization, 2010. Retrieved: March 10, 2014, http://www.who.int/gho/publications/world_health_statistics/EN_WHS10_Full.pdf

In old age, some decline in the quality of life in parallel to the physiological changes in the elderly is an expected situation. In order for the elderly to maintain their lives independently and to have a better quality of life, ensuring the lifelong health and healthy aging can only be possible by providing the necessary arrangements with the aim of creating a healthy and safe environment, developing the healthy life behaviours between the elderly people and in the society, arranging the socio-economic conditions that may negatively affect the elderly health and treating the chronic diseases in old age.

Targets and Strategies Identified for Improvement of Lifelong Health and Healthy Aging

Target 1- Taking necessary measures to prolong life expectancy at birth

Strategy 1

Reducing the incidence of non-communicable diseases and the deaths arising from these diseases

Strategy 2

Reducing the incidence of communicable diseases and the deaths arising from these diseases

Target 2- Improvement of life quality in old age

Strategy 1

Treatment of chronic diseases in old age

Target 3- Improvement of healthy lifestyle in the elderly and the society

Strategy 1

Raising awareness of healthy lifestyle in the elderly

Strategy 2

Raising awareness about healthy aging in the society

Target 4- Making necessary arrangements for the establishment of a safe and healthy environment for the elderly

Strategy 1

Ensuring a safe and healthy environment for the elderly inside and outside of home

1.1. Improvement of Lifelong Health and Healthy Aging

Target 1- Taking necessary measures to prolong life expectancy at birth					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
1.1. Reducing the incidence of non-communicable diseases and the deaths arising from these diseases	**1.1.1.** T.R. Ministry of Health Turkey Diabetes Program (2015-2020) **1.1.2.** T.R. Ministry of Health Turkey Cardiovascular Disease Prevention and Control Program (2015-2020) **1.1.3.** T.R. Ministry of Health Turkey Chronic Respiratory Disease Prevention and Control Program(2014-2017) **1.1.4.** Action Plan for National Tobacco Control Program (2015-2018) **1.1.5.** Turkey Healthy Nutrition and Active Life Program (2014-2017) **1.1.6.** Turkey Kidney Disease Prevention and Control Program (2014-2017) **1.1.7.** Turkey Excessive Salt Consumption Reduction Program (2011-2015) **1.1.8.** That the elderly population are taken as risk group in all groups	See the Relevant Programs	See the Relevant Programs	See the Relevant Programs	See the Relevant Programs
1.2. Reducing the incidence of communicable diseases and the deaths arising from these diseases	1.2.1. That the elderly population are taken as risk group in all studies	See the Relevant Study Group	See the Relevant Study Group	See the Relevant Study Group	See the Relevant Study Group

Target 2-Improvement of life quality in old age					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
2.1. Treatment of chronic diseases in old age	**2.1.1.** T.R. Ministry of Health Turkey Diabetes Program (2015-2020) **2.1.2.** T.R. Ministry of Health Turkey Cardiovascular Disease Prevention and Control Program (2015-2020) **2.1.3.** T.R. Ministry of Health Turkey Chronic Respiratory Disease Prevention and Control Program(2014-2017)	See the Relevant Programs	See the Relevant Programs	See the Relevant Programs	See the Relevant Programs

Target 3- Improvement of healthy lifestyle in the elderly and the society					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
3.1. Raising awareness of healthy lifestyle in the elderly	**3.1.1.** Arrangement of healthy lifestyle education in 81 provinces	**1.** Rate of the elderly that receives education **2.** Periodically and properly Implementation of education	Awareness-raising rate of the elderly trainees	Ministry of Health	Periodic
	3.1.2. Implementation of education in special days and weeks	**1.** Increase in the number of the organizations held in special days and weeks **2.** Allowing for the related activities in the websites of Ministry of Health **3.** Periodically and properly implementation of education	Increase rate in awareness-raising of the elderly trainees	**1.** Ministry of Health **2.** Ministry of Family and Social Policies **3.** Ministry of Internal Affairs **4.** Ministry of National Education **5.** Universities **6.** Governorates **7.** Turkish Radio and Television Corporation (TRT) **8.** NGO's	
	3.1.3. Increasing the use and activities of Websites by Ministry of Health to prevail the studies towards the elderly **3.1.4.** Creation of written and visual materials as well as videos	Formation of websites aimed at the elderly health	**1.** Significant increase in the use of Ministry of Health website **2.** Increase rate in awareness-raising of the elderly	Ministry of Health	3 years

Target 3- Improvement of healthy lifestyle in the elderly and the society					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
3.1. Raising awareness of healthy lifestyle in the elderly	**3.1.5.** Coordination with the Ministry of Health of the training activities conducted by Universities and NGO's towards for the public	**1.** Number of coordinated activities, training, etc. **2.** Communication with the institutions and organization by the Ministry of Health	Increase rate in social awareness	**1.** Ministry of Health **2.** Ministry of Family and Social Policies **3.** Ministry of Internal Affairs **4.** Universities **5.** NGO	3 years
	3.1.6. Holding study meetings for preparation of the training materials about healthy aging for individuals	**1.** Training materials about healthy aging prepared for individuals **2.** Printing and distribution of training materials about healthy aging prepared for individuals	Awareness surveys and life quality surveys (every 5 years)	**1.** Ministry of Health **2.** Ministry of Internal Affairs **3.** Ministry of National Education **4.** Universities **5.** NGO	2 years

Target 3- Improvement of healthy lifestyle in the elderly and the society					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
3.2. Raising awareness about healthy aging in the society	**3.2.1.** Allowing for the communication campaigns related to old age and elderly health themes to be conducted by the Ministry of Health	**1.** Including the old age and the elderly health themes in the campaigns of the Ministry of Health **2.** Allowing for the old age and the elderly health themes in the related communication campaign of the Ministry of Health periodically	Awareness surveys and life quality surveys (every 5 years)	Ministry of Health	2 years
	3.2.2. Adding the information/education related to healthy aging and communication with the elderly into the curricula of primary schools	**1.** Allowing for the relevant subjects in the fundamental training programs of the Ministry of National Education properly and periodically **2.** Arrangement of social activities for the relevant subjects related to old age included in the fundamental training programs	**1.** Awareness surveys **2.** Rate of schools arranging social activities for the subjects related to old age	**1.** Ministry of National Education **2.** Ministry of Health **3.** Ministry of Family and Social Policies	3 years
	3.2.3. Allowing for the projects under the health title in the project-based competitions conducted by the Ministry of National Education	Submission of the subject-related projects	Number of projects in the related competitions	**1.** Ministry of National Education **2.** Ministry of Health	3 years

Target 3- Improvement of healthy lifestyle in the elderly and the society					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
3.2. Raising awareness about healthy aging in the society	**3.2.4.** Promoting and Allocating resources to the projects in which university students and the elderly take part together	**1.** Number of proposal made to the relevant institutions **2.** Formation of sub-units in universities for ensuring integration and communication between generations	Implementation an sustainability of the projects in which university students and the elderly take part together	**1.** Ministry of Health **2.** Ministry of Family and Social Policies **3.** Ministry of National Education **4.** Ministry of Internal Affairs **5.** Universities	3 years
	3.2.5. Providing the implementation of in-service training programs about healthy and successfully aging in workplaces	Preparation and implementation of in-service training programs about healthy and successfully aging in workplaces	Awareness surveys and life quality surveys (Every 5 years)	**1.** Ministry of Health **2.** Ministry of Labour and Social Security	3 years
	3.2.6. Preparation of materials about healthy aging for the health care providers	Holding meetings for preparation of materials about healthy aging for the health care providers 1	Printing and Distribution of materials	**1.** Ministry of Health **2.** Universities **3.** NGO	2 years

Target 4- Making necessary arrangements for the establishment of a safe and healthy environment for the elderly					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
4.1. Ensuring a safe and healthy environment for the elderly inside and outside of home	**4.1.1.** Preparation of material and trainings that will raise awareness in the society in the subject of ensuing the healthy environment conditions inside home for the elderly	Relevant module in the Elderly Health Diagnosis and Treatment Guide of the Ministry of Health	Use of the relevant materials and distribution of print material	**1.** Ministry of Health **2.** Universities	Periodic
	4.1.2. Review of Home Care Services Regulations and preparation of personnel trainings for ensuring a healthy and safe environment in home care services	**1.** Relevant module in the Elderly Health Diagnosis and Treatment Guide of the Ministry of Health **2.** Use of the training materials comprised of the relevant training modules of universities and formation of print materials	Use of the relevant materials and distribution of print material	**1.** Ministry of Health **2.** Universities	2 years
	4.1.3. Provision of trainings by Health Care Professionals about ensuring a healthy and safe environment conditions inside home to the elderly	Holding meetings related to the subject	Number of the elderly trainees	**1.** Ministry of Health **2.** Ministry of Family and Social Policies **3.** Universities **4.** NGO	Periodic

1.2. IMPROVEMENT OF EXERCISE, PHYSICAL ACTIVITY AND REHABILITATION SERVICES FOR ELDERLY

Current Situation in the World and Turkey

Regular activity and exercise habits of the elderly are the most important determinants of short and long-term healthy aging. Physical activity is important for the elderly health by preventing the incidence of the diseases seen in old age.

Stating that physical activity is one of the important factors for health aging, the World Health Organization (WHO) asserts that regular physical activity improves physical and social well-being of the people over 65 and prevents them from the risk of injury and catching illnesses. In addition to this, it is also stated that physical activity made by the elderly reduces the risk of injury, strengthens mental and cognitive competence and also contributes socialization (10).

Active living improves mental health of older people, reducing the risk of falls, promotes social interaction and help them to remain as independent as possible. So the elderly people obtain economic benefits and their medical expenses significantly reduce as long as they continue to be physically active (11). Regular physical activity reflects the lifestyles as an important factor in maintaining the body's health. An effective physical activity program; improves strength, speed, endurance, balance, physical and mental functions and quality of life (12).

When a society profile, who is more dependent and has lost the joy of life and whose physical capacity and functional status have reduced, appears, morbidity and mortality rates in the elderly increase, the share allocated to health spending grows, the productivity decreases and more care staff are needed for the elderly care.

These problems in the elderly population brings a serious burden on the economy and productivity levels of the country. Today, many countries around the world, especially the ones in Europe, make urgent action plans for the solution and implement the promotion of the physical activity in the elderly as a priority health policy.

Examples from the World

As well as preventing obesity, physical activity contribute to the well-being situation in terms of physically and mentally sense. The researches show that physical activity reduce the risks of heart attack type 2 diabetes by 50 percent and this reduction may also be applicable for high blood pressure and certain cancers (13).

Furthermore, physical activity reduce stress, anxiety and depression risks. Sedentary lifestyle and smoking may cause deaths (14). Many researches have been conducted towards the effect of physical activity on fall, fear of falling and fractures. The studies related to activity show that physical activity reduce the falls by at least 30 percent (15).

In a research conducted in Europe, sedentary lifestyle is shown to be cause of 5,5 percent of coronary diseases, 6,8 percent of diabetes, 9,3 percent of breast cancer, 9,3 percent of colon cancer and 8,8 percent of all deaths (16). The World Health Organization states that 1 million deaths in the European Region arise from insufficient physical activity (13). 30 percent of Americans over 65 years was found to make regular physical activity and taking this rate to 60 percent is projected as a target (17).

Examples from our Country

Within the scope of "Status of Elderly and National Action Plan for Ageing" plan which was completed in 2007 and with the projects, study meetings and the reports of these which were carried out after then, such issues as "Home Care Services", "Chronic Obstructive Disease Care Services" and "Obesity Prevention and Activity" were focused on. The subject of exercise in the elderly was included in the physical activity guideline within the framework of "Turkey Healthy Nutrition and Active Life Program".

Gaining the exercise habits to the elderly individuals helps the protection of their functional performance levels, thus the levels of daily life of activity level. The studies show that the elderly with physical activity habits have longer, healthier and better health levels than the individuals living a sedentary life. Small gains in functional levels may lead to significant changes at functional levels. Therefore, that the elderly are encouraged and motivated to exercise within the framework of home care positively affects their physical and psychosocial health outcomes and the development of well-being status.

When elderly patients, rehabilitation when the return home is discharged home and environmental arrangements for people to cope with the problems of the natural life and to minimize the obstacles independent restricting the movement should continue with target home rehabilitation programs. Comprehensive Geriatric Assessment for seniors who are at risk and after the multi-dimensional program of preventive home visits, mortality rate, with reference to the functional loss or retirement homes and nursing homes are known to have positive effects.

Target and Strategies towards the Improvement of Exercise, Physical Activity and Rehabilitation Service for the Elderly

Target 1- Creation of knowledge level and social awareness in increasing physical activity and preventing sedentary lifestyle for healthy aging

Strategy 1

Ensuring to improve social consciousness and to raise social awareness of all age groups in society about the importance of physical activity for healthy aging

Strategy 2

Increasing social involvement and improving social responsibility projects about old age and aging in society

Strategy 3

In the joint works to be conducted through or with universities or other scientific organizations or professional associations, to increase the knowledge related to healthy aging and physical activity and the scientific researches thereof and to support universities, institutions and organizations working on this subject

Target 2- Prevention of chronic diseases arising frequently in old age or aging-associated diseases, implementation of studies related to cost effectiveness and reduction of health spending

Strategy 1

Development of targets towards the prevention of musculoskeletal and chronic diseases related to aging and increasing social awareness on this matter

Strategy 2

Prevention of chronic diseases and changes occurred in musculoskeletal and other systems in old age through exercise, physical activity, recreational activities and sports

Strategy 3

Reduction of elderly care costs, number of the elderly requiring constant care due to chronic diseases, frequency and duration of hospitalization and hospital admissions in chronic diseases

Target 3- Development of preventive and rehabilitative approaches towards determination of risk factors that may cause loss of balance, fall and fear of falling in the elderly

Strategy 1

Training about balance and fall, and understanding of the importance of physical activity and exercises in the subject of prevention of falls and fractures and development of service related to these issues

Target 4- Determination of rehabilitation needs and development of all rehabilitation services including professional and social rehabilitations for the dependent or semi-dependent elderly people in activities of daily living and social participation

Strategy 1

Determination of needs of the elderly who are dependent or semi-dependent in activities of daily living or social participation

Strategy 2

Development of special rehabilitation approaches for the elderly with higher mortality and morbidity risks and arrangement of physical activity programs to increase social participation

Strategy 3

Development or health tourism and rehabilitation services in order for our elderly citizens living abroad to receive the elderly care services in our country or for the foreign elderly people to benefit from the health care and rehabilitation services provided in our country with short and long term periods

1.2. Improvement of Exercise, Physical Activity and Rehabilitation Services for Elderly

Target 1- Creation of knowledge level and social awareness in increasing physical activity and preventing sedentary lifestyle for healthy aging					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
1.1. Ensuring to improve social consciousness and to raise social awareness of all age groups in society about the importance of physical activity for healthy aging	**1.1.1.** Development of curricula for normal aging process, healthy aging and physical activity in primary, secondary and higher education institutions; raising awareness on this issue through books, brochures and introductory conference	**1.** Course, course content given and number of students in primary, secondary and higher education institutions **2.** Number and contents of the education meetings held to inform the trainers and teachers **3.** Number of books printed in schools for promotion and information or number and content of the visual materials prepared (slides, video, film, etc.)	**1.** Young generation that know the importance of exercise and physical activity on healthy aging as a result of developing positive approaches to the elderly beginning from primary schools **2.** Young people who have understood the importance of active aging and prepare themselves for the future with this conscious	**1.** Ministry of Health **2.** Ministry of Internal Affairs **3.** Ministry of National Education **4.** Ministry of Family and Social Policies **5.** Ministry of Development **6.** Undersecretariat of Treasury **7.** SGK **8.** Institute of Population Studies **9.** YOK **10.** Universities **11.** TRT **12.** Press and Broadcasting Organizations **13.** NGO	3 years

Target 1- Creation of knowledge level and social awareness in increasing physical activity and preventing sedentary lifestyle for healthy aging					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
1.1. Ensuring to improve social consciousness and to raise social awareness of all age groups in society about the importance of physical activity for healthy aging	**1.1.2.** Raising awareness in some professional and educational organizations (military training, police, teacher, etc.) and other organizations (non-governmental organizations or professional associations) about old age, healthy aging and physical activity	Number and content of the training related to social participation, care and awareness toward the elderly people which are given to soldiers during military, service, to police and teachers	**1.** Enhanced knowledge of professionals and NGO about the elderly and elderly care **2.** Society with the increased number of persons who can play roles in social responsibility projects related to the elderly health and care **3.** Surveys conducted for controlling the social awareness and their results	**1.** Ministry of Health **2.** Ministry of Internal Affairs **3.** Ministry of National Education **4.** Ministry of Family and Social Policies **5.** Ministry of Development **6.** Undersecretariat of Treasury **7.** SGK **8.** Institute of Population Studies **9.** YOK **10.** Universities **11.** TRT **12.** Press and Broadcasting Organizations **13.** NGO	3 years
	1.1.3. Raising social awareness about normal aging process, active and healthy aging through press and broadcasting organizations, formation of models with the examples of active and healthy elderly people	**1.** Number and content of articles and interviews found in the print media related to this subject **2.** Number of programmes, debates and discussions in visual and auditory media (radio and television) related to this subject, ratings of these programmes or the negative or positive critiques from media	**1.** Elderly individuals with an enhanced conscious of exercise **2.** Elderly individuals with sufficient and enhanced physical activity level **3.** Elderly individuals with enhanced functional activity, developed quality of life, being far from social isolation **4.** Society whose elderly people are more active and productive		

Target 1- Creation of knowledge level and social awareness in increasing physical activity and preventing sedentary lifestyle for healthy aging					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
1.2. Increasing social involvement and improving social responsibility projects about old age and aging in society	**1.2.1.** Beginning from primary school, ensuring that the student groups of various ages spend their times by contributing to the daily car and living activities of the elderly especially in nursing home and retirement homes, and increasing of social participation areas	**1.** Number of primary, secondary and higher education institutions where the young and elderly spend time together and make social participation, and the feature and frequency of this social participation **2.**Number of the students playing role in social responsibility projects related to the elderly and feedback received from these students and feedbacks and satisfaction surveys received from the elderly in the same way	**1.** The elderly with enhanced communication with the young **2.** The young with enhanced communication with the elderly **3.** The elderly with reduced health problems arising from social isolation **4.** The individuals in the society, young, elderly and children, who have learned to help each other, learn together and spend some time together **5.** The elderly with enhanced role and activity in the society **6.** Scales evaluating psycho-social status **7.** Scales evaluating quality of life **8.** Scales evaluating life satisfaction, well-being and life happiness	**1.** Ministry of Health **2.** Ministry of Internal Affairs **3.** Ministry of National Education **4.** Ministry of Family and Social Policies **5.** Ministry of Development **6.** Undersecretariat of Treasury **7.** SGK **8.** Institute of Population Studies **9.** YOK **10.** Universities **11.** TRT **12.** Press and Broadcasting Organizations **13.** NGO	3 years
	1.2.2. Development of mandatory social responsibility projects and the joint projects with the elderly in the curricula of secondary and higher education institutions	**1.** Number of schools performing social responsibility projects and number of teachers taking part in these projects **2.** Number, features and scope of projects to be performed in this subject in schools, and the results of these projects **3.** Statistics, records and reports of joint projects that are performed with, institutions or non-governmental organizations working with the elderly, municipalities, nursing homes	**1.** The young that know normal course of old age and the problems that may arise in connection with old age **2.** The young with a developed sense of social responsibility, looking after and supporting the elderly **3.** The young who play role in the care or the support of the elderly and in the community health, and have created an active human power which has become a problem in the care of the elderly **4.** Surveys related to the efficiency of social participation		

Target 1- Creation of knowledge level and social awareness in increasing physical activity and preventing sedentary lifestyle for healthy aging					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
1.3. In the joint works to be conducted through or with universities or other scientific organizations or professional associations, to increase the knowledge related to healthy aging and physical activity and the scientific researches thereof and to support universities, institutions and organizations working on this subject	**1.3.3.** Creation of scientific database of the elderly and society with the studies to be conducted with universities, the relevant institutions and organizations and professional associations	Surveys conducted by universities with the other relevant institutions and organizations and professional association or surveys or screening studies conducted by each institution independently, or comparative studies performed by age, gender and regions, and statistical results of these studies	**1.** Enhanced scientific database on the elderly **2.** Society that has a more local and healthier aging guideline arranged according to Turkey profile	**1.** Ministry of Health **2.** Ministry of Internal Affairs **3.** Ministry of National Education **4.** Ministry of Family and Social Policies **5.** Ministry of Development **6.** Undersecretariat of Treasury **7.** SGK **8.** Institute of Population Studies **9.** YOK **10.** Universities **11.** TRT **12.** Press and Broadcasting Organizations **13.** NGO	3 years
	1.3.4. Provision of implementation of postgraduate research and thesis related to this issue in universities and sharing the results of multidisciplinary studies	**1.** Reports of theses conducted at the graduate or postgraduate levels or the print materials derived from these (articles, books, oral or poster presentations or summaries of these presentations) **2.** Outputs or survey results demonstrating the effects of results arising from the researches and theses on elderly nursing home and public health **3.** Number of studies, researches, projects and theses conducted on this subject, feedbacks of students and other researchers, results of thesis and studies **4.** Number and rates of society-based or enterprise-based projects	**1.** Result of more researches related to elderly and healthy aging **2.** Clinical practices towards increasing old age and elderly health or more scientific basis for society-based studies **3.** Number of the elderly whose quality of life is measured		

Target 2- Prevention of chronic diseases arising frequently in old age or aging-associated diseases, implementation of studies related to cost effectiveness and reduction of health spending					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
2.1. Development of targets towards the prevention of musculoskeletal and chronic diseases related to aging and increasing social awareness on this matter	**2.1.1.** Informing the society of the diseases arising frequently in old age or aging-associated disease **2.1.2.** Using press and media in informing about the harmful effects of inactivity and sedentary life on development of chronic diseases **2.1.3.** Establishment of awareness about physical activity and desire	**1.** Results of surveys measuring the knowledge level on chronic diseases **2.** TUIK records **3.** Articles, programmes and introductory films published in press and media	**1.** Society having more and accurate information on chronic diseases **2.** Society knowing the harmful effects of sedentary life and physical activity on chronic diseases **3.** Individuals who know and having enhanced awareness about the positive effects of physical activity on chronic diseases	**1.** Ministry of Health **2.** Ministry of Internal Affairs **3.** Ministry of National Education **4.** Ministry of Family and Social Policies **5.** Ministry of Development **6.** Undersecretariat of Treasury **7.** SGK **8.** Institute of Population Studies **9.** YOK **10.** Universities **11.** TRT **12.** Press and Broadcasting Organizations **13.** NGO	3 years

Target 2- Prevention of chronic diseases arising frequently in old age or aging-associated diseases, implementation of studies related to cost effectiveness and reduction of health spending

Strategy	Activities	Output Indicators	Result Indicators	Responsible Institution and Organization	Period
2.2. Prevention of chronic diseases and changes occurred in musculoskeletal and other systems in old age through exercise, physical activity, recreational activities and sports	**2.2.1.** Creation of model programs related to the benefits of exercise **2.2.2.** Development of elderly exercise programs on local and community basis **2.2.3.** Encouragement of physical activity by organizing elderly journals **2.2.4.** Establishment of programs ensuring elderly peer trainings **2.2.5.** Establishment of programs promoting recreational activities and sports **2.2.6.** Receiving support of and being collaboration with the people who have the leader positions in the community on the subject of sports, and establishment programs towards these **2.2.7.** If possible, establishment of recreational activity programs that will contribute to production	**1.** Number, monitoring rates and ratings of booklet, video or movies telling the positive effects of physical activity and exercise on chronic diseases **2.** Number of guidebooks, booklets and leaflets containing elderly exercise programs on local and community basis **3.** Total number of exercise programs provided in all health institutions, retirement homes and sports halls for elderly and to prevent chronic diseases and number of people receiving service therein	**1.** Number of elderly taking exercise and doing physical activity **2.** Elderly population doing physical exercise and having enhanced social participation **3.** Elderly individuals doing regularly physical activity and having enhanced performance **4.** Number of elderly feeling enhanced appreciation for social participation **5.** More independent and happier elderly in recreation, sports and activities of daily living **6.** Elderly having enhanced motivation for physical activity and active living **7.** Elderly individuals with more productive ability in society and with less depression and feelings of loneliness and social isolation	**1.** Ministry of Health **2.** Ministry of Internal Affairs **3.** Ministry of National Education **4.** Ministry of Family and Social Policies **5.** Ministry of Development **6.** Undersecretariat of Treasury **7.** SGK **8.** Institute of Population Studies **9.** YOK **10.** Universities **11.** TRT **12.** Press and Broadcasting Organizations **13.** NGO	3 years

Target 2- Prevention of chronic diseases arising frequently in old age or aging-associated diseases, implementation of studies related to cost effectiveness and reduction of health spending

Strategy	Activities	Output Indicators	Result Indicators	Responsible Institution and Organization	Period
2.3. Reduction of elderly care costs, number of the elderly requiring constant care due to chronic diseases, frequency and duration of hospitalization and hospital admissions in chronic diseases	**2.3.1.** Development of chronic diseases prevention programs to reduce hospital admissions **2.3.2.** Establishment of units that inform of the importance of exercise in treatment of chronic diseases **2.3.3.** Development of exercise programs for any kind of chronic diseases **2.3.4.** Use of financial benefits arising from the reduction of health spending for preparation of booklets, leaflets and other statistical reports, and submission of these to the necessary institutions and organizations and for the information of community	**1.** Family practice and primary service records **2.** Records of the persons responsible for home care services **3.** Records of elderly nursing homes, day care centres, retirement homes **4.** Hospital records **5.** Spending records of Ministry of Health and SGK	**1.** Reduction in the number of people consulting family physician **2.** Reduction of requirement for and service spending in primary health care **3.** Reduction in the number of elderly requiring home care service and of home care providers **4.** Reduction of the number of patients requiring constant care or institutional care (elderly nursing home, etc.) and reduction of health spending therein **5.** Reduction of hospitalization and hospital admissions **6.** Reduction of hospitalization duration and health spending and the need for less number of health care personnel	**1.** Ministry of Health **2.** Ministry of Internal Affairs **3.** Ministry of National Education **4.** Ministry of Family and Social Policies **5.** Ministry of Development **6.** Undersecretariat of Treasury **7.** SGK **8.** YOK **9.** Universities **10.** Press and Broadcasting Organizations **11.** NGO	3 years

Target 3- Development of preventive and rehabilitative approaches towards determination of risk factors that may cause loss of balance, fall and fear of falling in the elderly					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
3.1. Training about balance and fall, and understanding of the importance of physical activity and exercises in the subject of prevention of falls and fractures and development of service related to these issues	**3.1.1.** Creation of materials and programs to inform elderly of internal and external factors leading to falls and loss of balance and to raise awareness on this issue **3.1.2.** Establishment of courses and preparation of physical environment aimed at informing elderly relatives and caregivers in order to increase the positive effects of physical activity on fall and balance **3.1.3.** Arrangement of houses and external environment of elderly in such a way to prevent falls and fear of falling **3.1.4.** Establishment of the units in which the relevant specialized health professionals that determine the risk factors towards falls work.	**1.** Statistics on fall incidence in certain age groups **2.** Statistics and data on fall incidence of elderly in hospital, institution and home **3.** Reports demonstrating mortality and morbidity levels arising from the fall-associated complications **4.** Statistical data on fall and complication-associated health spending and services **5.** Data (statistical data, hospital data, etc.) on the changes in fall incidence observed after physical activity and training	**1.** Elderly without fear of falling **2.** Elderly with decreased incidence of fall and fracture development **3.** Decreased number of elderly having loss of balance and fall-related activity limitation **4.** Elderly who feel safe and competence themselves live in a place around which arrangements aimed at risk factors have been made at home and in their institutions or hospitals	**1.** Ministry of Health **2.** Ministry of Internal Affairs **3.** Ministry of Environment and Urbanisation **4.** Universities **5.** NGO	3 years

Target 4- Determination of rehabilitation needs and development of all rehabilitation services including professional and social rehabilitations for the dependent or semi-dependent elderly people in activities of daily living and social participation					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
4.1. Determination of needs of the elderly who are dependent or semi-dependent in activities of daily living or social participation	**4.1.1.** Determination of functional status, functionality, disability and health of elderly according to international standards **4.1.2.** Determination of the profile of dependent and semi-dependent elderly with temporary or permanent disability, activity limitation and social participation **4.1.3.** According to the WHO and international database, determination of priority of elderly with important diseases **4.1.4.** Determination of standards defining the levels of functional losses arising from physical activity level, chronic diseases and inactivity; determination of clinical and field studies related to these issues	**1.** Results of physical functions **2.** Evaluation of activity limitation **3.** Results of evaluation of social participation	**1.** Formation of health policies knowing the functional levels of elderly according to functional status evaluation and defining the targets accordingly **2.** Ministry of Health and relevant health institutions that can develop strategic and target-specific health policies on rehabilitation and care services by determining the needs of elderly population	**1.** Ministry of Family and Social Policies **2.** Ministry of Health **3.** Ministry of Internal Affairs **4.** Universities **5.** NGO	3 years

Target 4- Determination of rehabilitation needs and development of all rehabilitation services including professional and social rehabilitations for the dependent or semi-dependent elderly people in activities of daily living and social participation					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
4.2. Development of special rehabilitation approaches for the elderly with higher mortality and morbidity risks and arrangement of physical activity programs to increase social participation	**4.2.1.** Provision of prioritized rehabilitation services for the elderly with higher mortality and morbidity risks **4.2.2.** Establishment of multidisciplinary rehabilitation teams, and Provision of service by these teams for such institutions as retirement homes, nursing homes, day care centres **4.2.3.** Establishment and Dissemination of centres in public and private institutions that will provide service for elderly **4.2.4.** Determination by multidisciplinary rehabilitation team where the disabled elderly will be cared and rehabilitated after hospitalization **4.2.5.** Establishment of national policies to society-based rehabilitation services (rural areas, correction facilities and homeless, etc.) **4.2.6.** Regulation of service vehicles and mobile rehabilitation teams in order to provide health care services for the elderly who cannot reach institutional rehabilitation services **4.2.7.** Determination and Guidance by Provincial Authorities of the elderly who are in need of rehabilitation and cannot reach the services **4.2.8.** Raising awareness of the community, planning of the community-based rehabilitation team services and voluntary organizations for the elderly who cannot reach the rehabilitation services **4.2.9.** Planning of tele-rehabilitation services for the elderly who are in need of rehabilitation and cannot reach the service **4.2.10.** Handling of the subjects of disability and incapacity in elderly and disabled elderly in national programs and policies **4.2.11.** Supporting and facilitation of the establishment of non-governmental organizations by the elderly with disabilities and the ones providing care services. Supporting and encouragement of the NGO's works on this issue **4.2.12.** Opening of elderly hobby houses, day care and rehabilitation centres	**1.** Data indicating the decreased frequency in hospitalization **2.** Number of the elderly receiving service from hobby houses and day care and rehabilitation centres **3.** Satisfaction levels of the elderly themselves and their families	**1.** Increase in physical functions and social participation of the elderly **2.** Reduction in the burden of the families assuming elderly care **3.** Decrease in the frequency of hospitalization **4.** Reduction in health spending related to elderly rehabilitation **5.** Integrated rehabilitation and recreation services	**1.** Ministry of Health **2.** Ministry of Family and Social Policies **3.** Ministry of Internal Affairs **4.** SGK **5.** Universities **6.** NGO	3 years

Target 4- Determination of rehabilitation needs and development of all rehabilitation services including professional and social rehabilitations for the dependent or semi-dependent elderly people in activities of daily living and social participation					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
4.3. Development or health tourism and rehabilitation services in order for our elderly citizens living abroad to receive the elderly care services in our country or for the foreign elderly people to benefit from the health care and rehabilitation services provided in our country with short and long term periods	**4.3.1.** Promotion of initiatives of utilization from transport and accommodation services provided by public and private sectors free of charge **4.3.2.** Implementation of new regulations for spa tourism in order to ensure equality of opportunity the for utilization of elderly health and rehabilitation services including the elderly living in rural areas, and promotion of quota allocation for elderly who are in need of rehabilitation	**1.** Number of the elderly benefitting from free transport and accommodation services **2.** Number of the elderly benefitting from spa tourism	**1.** Elderly with enhanced well-being and quality of life **2.** Increase in the number of the rehabilitation services for the elderly who are living in rural areas and are not likely to reach these services **3.** Elderly who have benefitted from rehabilitation services in spa **4.** Elderly with decreased social isolation and increased social participation	**1.** Ministry of Health **2.** Ministry of Internal Affairs **3.** SGK	3 years

1.3. DEVELOPMENT OF HOME CARE SERVICES AND HOME HEALTH CARE SERVICES FOR ELDERLY

Current Situation in the World and Turkey

Considering the fact that preventive, curative and rehabilitative care should be provided continuously and in an effective way, the concept of home care refers to a care system aiming to strengthen and support common health care services.

The concept of home care is expressed in different ways in different countries, and the "Home Care, Home Health Care, Home Health and Social Care" definitions are often used interchangeably. The conceptual confusion related to the definition and scope of home care has not yet resolved in our country. Generally, home social support and assistance services are defined as home care.

Home care is a complete wide range of short or long-term health and social services provided for the people with health problems, chronic or terminal diseases or disabilities at home.

According to the WHO, home care is the service provided by formal and informal caregivers in the home environment. With a more general definition, home care can also be stated as all services presented at home in order to develops, improve and protect physical, mental and psychological health of individuals (18).

"Home Care" which is found in the literature as a general concept covering both health and social services are divided into two main categories as "Home Health Care" and "Home Social Care And Support Services."

Different definition have been used in various meanings in our country. For improvement of home care services, it is of vital importance to use a common definition for the studies to be conducted by the relevant institutions and organizations. To create a common language in the studies of Turkey Healthy Aging Action Plan and Implementation Program 2015-2020, the following definitions established in the world examples have been accepted.

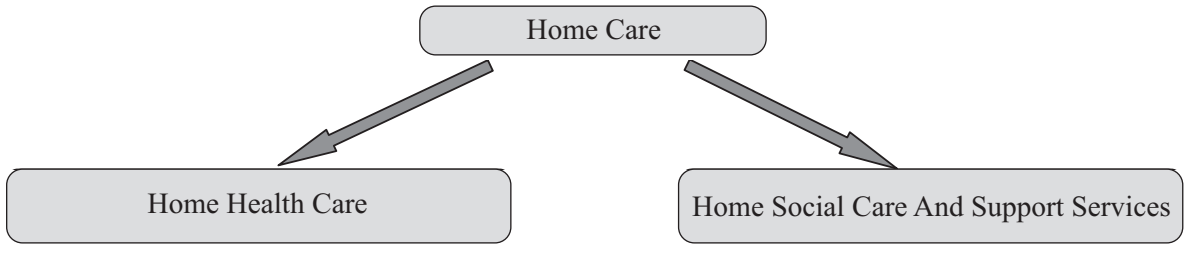


Figure 3. Home Care Services

In target, strategy and actions related to both fields covering social and support services in the studies of Turkey Healthy Aging Action Plan and Implementation Program 2015-2020, "Home Care" has been used as a definition covering both fields. When it is required to define one of the service fields, "home health care" and "home social care and support services" have been used as separate concepts.

Today, home care has become a health care service model which is preferred and regarded as an effective service delivery model in many countries. Although the models implemented differ from one country to another due to the differences in socio-economic structures, health and social service models and social security systems and cultural dissimilarities, the intense works are seen in all of the country models which have established home care system and are about to establish this for the sake of dissemination and development of these services. Some application examples seen in the world examples and solution approaches are listed below:

1. Service Providers: Non-profit organizations, home care units established in hospitals, home care institutions, non-governmental organizations and voluntary organizations play roles in the provision of home care services. Service providers undergo a licensing process by the relevant institutions according to their activity fields (health care services or social care and support services). Families play important roles both in health care services and in home social care and support services, thus many programs have been developed in order to support the families.

2. Regulation and Supervision of Services: In some examples which are suitable for the existing systems of the countries, while home care and social care services are arranged by a single public institution, in other examples, home care services are regulated by Ministry of Health and home social care and support services are under the responsibility and control of local authorities. Supervision are supported by public institutions and local authorities as well as accreditation systems.

3. Integration of Services: Even if home care and home social care and support services are provided by different institutions, they should be conducted in full coordination and collaboration with each other. When both health and social care needs come into question at the same home, the institution providing health care services mostly provides social services as well. In some examples, home care institutions provide for both fields and host the multidisciplinary structure entailing this.

4. Imbursement of Services and Financing: Both health care service and social care services provided at home which are seen in the examples of developed countries are covered by public social security systems. Imbursement of services are generally carried out through two channels. While home care services are covered by social security system, social care services are covered by care insurances. Care insurance particularly covers personal care and social rehabilitation services, and financing of some support services (repair, arrangements, transportation, delivery services, etc.) apart from this are covered by local authorities. Care insurance not only cover social care services but it can also be maintained if health care services provided at homes surpass the determined period (60 days, 90 days, etc.).

Care insurance is funded by premiums collected during the working period as in health insurance. Also it is supported by tax-based public sources. With the increasing elderly population and chronic diseases creation of an additional source for care insurance is of great importance. As seen in the past examples, the deductions made from lottery and other betting games or other implementations to create additional funds with other sources for care insurances are becoming prevalent. On the other hand, private care insurance has been promoted by governments in many countries in order to alleviate the burden on public social security system.

In sum, public health insurance system, private care insurances, public and private care insurances, budgets of local governments, tax-based public funds, and the payments of individuals and families are used as a source to finance home health care and home social care and support services.

5. Specialization and Branching in Services: In treatment and care methods, the rapid advances in medical technology have made it possible to take more services to home, and the scope of services and the service providing teams have also been expanded. This development has introduced the need for specialization and branching. Beginning with the applications of community health nursing practices in the 1800s, home care, which was carried out as a nursing service for a long time, has developed into an interdisciplinary service field since 1950s. In this regard, specialization has become extremely important with wide-ranging service fields with respect to the increasing need for more effective and efficient service provision. Today, in the examples of developed countries, many specialization areas, such applications as nutrition at home, wound care, chemotherapy at home, home medical equipment and equipment services, physical therapy at home, home psychotherapy, disease management, telemedicine at home (remote management of the individual's health by using the latest technology devices and systems) were formed and have been formed many specialist areas such as applications It formed and are formed.

6. Role of Family: Despite the improvement in the provision of professional services, it should be remembered that family members have assumed one of the most important roles in home care services in the past and present. That the family members undertaking roles in home care are supported in terms of social, psychological and financially and that the supervision support is provided through professional organizations has been included in the home care models of many countries.

Current Situation in Turkey in Terms of Home Care Services

Unfortunately, provision of home care in Turkey as a professional service has begun quite late in comparison with the examples in the word. The first professional service provision examples were started by private enterprises 15 years ago, and these services have been followed by the services provided by local authorities since 2001. The first legal regulation on this field was the “Regulation on Home Care Service Provision,” which was issued by the Ministry of Health and came into force be being published on the Official Gazette No: 25751 of 10 March 2005 many years after the start of service provision.

Apart from the Ministry of Health, a number of regulations on this field, beginning from 1 July 2005 (Repealed), have been carried out by the Prime Ministry, Social Services and Child Protection Agency. With these regulations, provision of care at home or at institutions for the “Disabled that Need for Care” by public or private care centres was made to be possible. Moreover, for the first time, care benefit payment has been put into practice for the family members suffering economic and social deprivation who assume to provide home caring for the disabled in need of care. With an addition made in the following dates, the elderly in need of care were enabled to benefit from these opportunities.

The first examples of home health care services provided by public hospitals began in 2004. In the following period of 5-6 years, home health care services have begun to be offered by public hospitals in 10 provinces. The “Regulation on Principles and Procedures of Home Health care service Provisions”, issued by the Ministry of Health and put into practice in February 2010, was an important step for the dissemination of these services throughout the country. The aim of the directive was expressed as

"Provision of examination, diagnosis, treatment, medical care and rehabilitation for the individuals who are in need of home health care service and Establishment of home health care service units within the health institutions under the Ministry of Health in order to provide social and psychological support services as a whole to these individuals and their family members."

In addition, with the expression in the Directive, "to provide home health care services in an effective and accessible way with the perception of social state," the Ministry of Health reveals its approach to the provision of these services by means of public hospitals. Since the last months of 2010, public hospitals the Ministry of Health has included public hospitals, family physicians and community health centres in the provision of service to disseminate home health care services across the country. As well as home care units established public hospitals, coordination centres within the public health directorates have been established as per the legislations.

With the amendments and additions, in February 2011, the "Regulation on Principles and Procedures of Home Health care service Provisions" issued by the Ministry of Health was updated. The education and research hospitals and general or branch hospitals operating under the Ministry of Health, home health care service units established within oral and dental health centres and community health centres, family health centres and family physicians have been restructured. By establishing home care units, University hospitals have been made to be possible to provide these services.

While neurological bedridden patients were targeted initially, over the course of the process, the target group and services were extended with such health care services as chronic pulmonary diseases, cardiovascular diseases, palliative care, oral and dental health, new-born care and psychotherapy at home. One of the key developments in 2011 was that home health services was included in the coverage of General Health Insurance over the payments on the "daily treatment" table found in the Communiqué of Health Applications.

Table 3. Home Health Care Services by Year

Home Health Care Services by Year	2010	2011	2012	2013	2014 (December)
Total Patient Access	**16.651**	**124.085**	**244.961**	**380.814**	**510.352**
Active Registered Patient	**16.651**	**80.388**	**139.214**	**186.666**	**218.353**
Number of Units	**407**	**642**	**715**	**817**	**915**
Number of Vehicles	**78**	**793**	**956**	**1.128**	**1114**
Number of Employees	**478**	**3.512**	**4.143**	**4.248**	**4.605**

Source: Basic Health Statistics Module (BHSM)

Target and Strategies for Home Health Care Services towards Elderly and Improvement of Home Care Services

Target 1- Development of State Home Care Model

Strategy 1

Clarification of definition and scope of home care services (for both health and social services) and use of common language by the relevant institutions

Strategy 2

Clarification of roles of the institutions providing home care services (health and social services)

Strategy 3

Ensuring coordination between service providing institutions and unit

Target 2- Improvement of Home Care Services

Strategy 1

Establishment of standards for home care (for health and social services)

Strategy 2

Development of implementation of primary health care

Strategy 3

Prevention of the problems and errors associated with drug use at home

Target 3- Dissemination of Home Care Service

Strategy 1

Introduction of home care service, and informing the elderly and their families about home care service and to which services they can access

Strategy 2

Effective contribution of university hospitals to the provision of home care service

Strategy 3

Supporting NGO's in the contribution to home care, service provision and studies

Target 4- Improvement of the Legislations related to Home Care

Strategy 1

In the current situation, harmonization of the relevant legislations issued by the Ministry of Health and the Ministry of Family and Social Policies with each other and the needs

Strategy 2

Updating the Regulation on Home Care Service Provision issued by the Ministry of Health in 2005 in accordance with the current needs and conditions

Strategy 3

Harmonization of all of the legislations related to home care and health care services of the Ministry of Health and the Ministry of Family, Social Policies and the relevant public institutions with the relevant professional legislations

Strategy 4

Defining the legislations related to duties and responsibilities of care support personnel

Target 5- Improvement of Home Care Reimbursement (Funding)

Strategy 1

Facilitating prescription practices especially for bedridden patients

Strategy 2

Facilitating committee report applications for the individuals receiving home health care service and with chronic diseases

Strategy 3

Arrangement of the use of medical equipment and devices at home as a professional service area as in the international examples

Strategy 4

Development of public and private care insurance models to meet the long-term care requirements that will increase in the coming years

Strategy 5

Introduction of cost-effectiveness studies in home care service

Strategy 6

Including private home care centre and units in Communiqué of Health Applications (CHA) with the establishment of the necessary supervision infrastructure by SGK

Target 6- Meeting Educational Needs of Home Care Personnel and Developing Employment Policies

Strategy 1

Developing education levels of health care and social service personnel involved in home care services in cooperation with the Ministry of Family and Social Policies

Strategy 2

More involvement of health care professionals specialized in the field of geriatrics (physicians, nurses, physiotherapists, etc.) in home health care services

Strategy 3

Making improvements in the contribution of professional groups involved in home health care services to performance systems and working capitals

Strategy 4

Ensuring the education of the elderly receiving home health care services and their families

1.3. Home Health Care Services towards Elderly and Improvement of Home Care Services

Target 1-Development of State Home Care Model					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
1.1. Clarification of definition and scope of home care services (for both health and social services) and use of common language by the relevant institutions	**1.1.1.** Holding meetings to define service areas and Establish a common language	Publishing a common guideline that defines the scope of service areas and to will be used by all institutions	Provision of services by all service providers in accordance with the guideline to be published	**1.** Ministry of Health **2.** Ministry of Family and Social Policies **3.** Ministry of Development **4.** SGK **5.** Universities **6.** NGO	1 years

Target 1-Development of State Home Care Model					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
1.2.Clarification of roles of the institutions providing home care services (health and social services)	**1.2.1.** Arrangement of legislations for provision of home health care services by Ministry of Health, universities and private home care centres and units, and provision of home social care and support services by municipalities, wherever municipalities are unable to provide sufficiently, by Ministry of Family and Social Policies	Clearly defining which institution will provide which service, and involving this in the relevant legislations	Elimination of the repetitions in service provisions	**1.** Ministry of Health **2.** Ministry of Family and Social Policies **3.** Ministry of Development **4.** SGK **5.** Universities **6.** NGO	1 years
1.3. Ensuring coordination between service providing institutions and unit	**1.3.1.** Establishment of a coordination centre within governorships in each province in for the integration of home health care and social services and in order for the people in need to access to the services from a single point. Provision of representation of Provincial Directorate of Family and Social Policies, local authorities and, if applicable, NGO's providing service in that area in this coordination centres.	Opening and operating of coordination centres which coordinating health and social services in all provinces	Facilitation of service provision, increase in the efficiency of service provision and prevention of service repetition	**1.** Ministry of Health **2.** Ministry of Family and Social Policies **3.** Ministry of Internal Affairs **4.** NGO	

Target 2-Improvement of Home Care Services					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
2.1. Establishment of standards for home care (for health and social services)	**2.1.1.** Conducting studies for establishment of common standards intended for service areas; establishment of coordination and National Accreditation Standards among the relevant authorities	Introduction of a guideline intended for the standards of service areas	Number of accredited institutions which have started to provide service of the service providers in accordance with the common standards	**1.** Ministry of Health **2.** Ministry of Family and Social Policies **3.** Social Security Institution **4.** Universities **5.** TSE **6.** NGO	1 year
2.2.Development of implementation of primary health care	**2.2.1.** Establishment of guidelines, periodic follow-up and screening programs for home preventive health applications	**1.** Guidelines and programs to be established **2.** Number of patients undergoing geriatric screening and follow-up	Support of primary health care at home with the guidelines and programs to be established	**1.** Ministry of Health **2.** Universities **3.** NGO	1 year
2.3. Prevention of the problems and errors associated with drug use	**2.3.1.** Establishment of Trainings and programs about proper medication intended for the families and caregivers	Training programs, booklets and other documents to be established for proper medication	Increase in the numbers of trainings to be arranged and of the informative documents distributed	**1.** Ministry of Health **2.** Universities **3.** NGO	Periodic

Target 3-Dissemination of Home Care Services					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
3.1. Introduction of home care service, and informing the elderly and their families about home care service and to which services they can access	**3.1.1.** Use of promotional material activities, printed and visual media intended for community; preparation and distribution of informative pamphlets and booklets **3.1.2.** Informing neighbourhood headmen of how they can access to services and provide the necessary information the those in need	Improving of the information of those in in need and their families as to how they can receive home care services	Increase in the number of the elderly receiving service; facilitation of access to services	**1.** Ministry of Health **2.** Ministry of Family and Social Policies **3.** Ministry of Internal Affairs **4.** Universities **5.** NGO **6.** Press and Broadcasting Organizations	Periodic
3.2. Effective contribution of university hospitals to the provision of home care service	**3.2.1.** Establishment of home care units in university hospitals and commencement of provision of these services by these institutions	**1.** Number of universities which have established home care units **2.** Number of the elderly receiving home care services in universities	Dissemination of home health care services for those needing tertiary health care service by means of home health care units in universities	**1.** Ministry of Health **2.** Universities	1 year
3.3. Supporting NGO's in the contribution to home care, service provision and studies	**3.3.1.** Encouraging NGO's which working for home care services (service provision and training, etc.); providing convenience that these associations can be granted the status of associations working for public benefit	**1.** That NGO's play an active role in the provision of home care services and training activities **2.** Increase in the number of NGO's operating in the field of home care services	Number of the elderly receiving service from NGO's	**1.** Ministry of Health **2.** Ministry of Family and Social Policies **3.** Ministry of Internal Affairs	3 year

Target 4-Improvement of the legislations related to home care					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
4.1. In the current situation, harmonization of the relevant legislations issued by the Ministry of Health and the Ministry of Family and Social Policies with each other and the needs	**4.1.1.** Harmonization of the legislations issued by Ministry of Health and Ministry of Family and Social Policies with each other by conducting a common study **4.1.2.** Holding regular meetings in order to obtain the contributions of all relevant institutions **4.1.3.** Defining home health care and social services with a holistic and complementary approach in the legislations	Implementation of the legislations on home care services by Ministry of Health and Ministry of Family and Social Policies in a holistic and compatible way	Realization of the reflections of the studies conducted in the title of target (development of country model) on the legislations	**1.** Ministry of Health **2.** Ministry of Family and Social Policies **3.** Ministry of Development **4.** SGK **5.**Universities **6.** NGO	3 years
4.2. Updating the Regulation on Home Care Service Provision issued by the Ministry of Health in 2005 in accordance with the current needs and conditions	**4.2.1.** Updating the Regulation on Home Care Service Provision	Enactment of the legislations in accordance with the current requirements and conditions	Continuation of service provision by private home health care units and centres according to the applicable regulations	**1.** Ministry of Health **2.** Universities **3.** NGO **4.** Private Home Care Units and Centre	3 years
4.3. Harmonization of all of the legislations related to home care and health care services of the Ministry of Health and the Ministry of Family, Social Policies and the relevant public institutions with the relevant professional legislations	**4.3.1.** Conducting studies for harmonization of all of the legislations related to home care and health services by Ministry of Health, Ministry of Family and Social Policies and other relevant public institutions with the relevant professional regulations (nursing services regulations) on this subject	Involvement of the duties and responsibilities defined in the relevant legislations in all of the legislations related to home care and health services in a harmonious way	Updating of the legislations related to both professional and health services of the relevant Ministry, institution and organizations in a harmonious way with the new regulations	**1.** Ministry of Health **2.** Ministry of Family and Social Policies **3.** Universities **4.** NGO	3 years

Target 4-Improvement of the legislations related to home care					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
4.4. Defining the legislations related to duties and responsibilities of care support personnel	**4.4.1.** Implementation of job description of care support personnel, determination of their work areas; conducting studies to define these in the relevant legislations **4.4.2.** In addition, ensuring that these support personnel are employed by service providing institutions in the same standards	**1.** Clarification of job description and work areas and including these in the relevant legislations **2.** Preparation of a guideline involving service standards and job descriptions to be used in service providing institutions	**1.** Service provision by care support personnel in a way specified in the legislations **2.** Service provision by service providing institutions in the same standards	**1.** Ministry of Health **2.** Ministry of Labour and Social Security **3.** Ministry of Family and Social Policies **4.** Universities **5.** NGO	3 years

Target 5- Improvement of Home Care Reimbursement (Funding)					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
5.1. Facilitating prescription practices especially for bedridden patients	**5.1.1.** Making new regulations aimed at facilitating prescription practices especially for bedridden patients	Authorization for the family physicians or the physicians providing home care services to write out prescriptions for the bedridden patients in need of home care who cannot go to hospital for examination by specialist physicians	Ensuring the facilitation for bedridden patients to access to the required medication, medical supplies and other medical products, and prevention of ill-treatment arising from hospital admission impossibilities	**1.** Ministry of Health **2.** SGK **3.** Universities	1 years
5.2. Facilitating committee report applications for the individuals receiving home health care service and with chronic diseases	**5.2.1.** Making necessary arrangements to extend the report period for the bedridden patients who have chronic diseases and to eliminate the requirement of obtaining committee reports after the first report in chronic diseases	Ensuring that the bedridden patients receiving home care service can receive services and use medical equipment and products without needing to obtain committee reports again after the first report	That the patient with chronic diseases do not have to be hospitalized for obtaining a new committee report for their reports have expired	**1.** Ministry of Health **2.** SGK **3.** Universities	1 years
5.3. Arrangement of the use of medical equipment and devices at home as a professional service area as in the international examples	**5.3.1.** Making necessary regulations to define and implement the use of medical equipment and devices at home as a professional service area **5.3.2.** Ensuring that training of service equipment operation should be provided in association with the necessary periodic care and control, 7/24 technical support, calibration and disinfection should be provided **5.3.3.** Development of leasing and service procurement models for cost-effectiveness	**1.** Ensuring that the procurement of the medical equipment and devices used at home should be provided with the complementary services **2.** Implementation of service procurement model in the defined standards instead of purchase of devices	**1.** Increase in the awareness of patients and their families in the use of medical devices **2.** Increase in the performance of medical equipment and devices in the complementary services **3.** Improvements in treatment and care outcomes thanks to infection control; prevention of ill-treatments undergone by families with support services and prevention of material injury in terms of SGK **4.** Improvements and Dissemination in treatment and care applications performed at home with the support of medical devices	**1.** Ministry of Health **2.** SGK **3.** NGO	3 years

Target 5- Improvement of Home Care Reimbursement (Funding)					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
5.4. Development of public and private care insurance models to meet the long-term care requirements that will increase in the coming years	**5.4.1.** Commencement of a technical study by the relevant institutions to establish Care Insurance Model **5.4.2.** Examination of foreign models and implementation of a model that can be covered by the country sources as soon as possible **5.4.3.** Formation of the legislation structure required for care insurance	Formation of care insurance systems in our country ro meet the long-term requirements	Number of persons with public or private care insurance	**1.** Ministry of Family and Social Policies **2.** Ministry of Health **3.** Ministry of Finance **4.** Ministry of Development **5.** SGK **6.** Undersecretariat of Treasury **7.** NGO	1 years
5.5. Introduction of cost-effectiveness studies in home care service	**5.5.1.** Development of registration systems required for the follow-up of costs of service providing institutions (public, local authorities, private enterprises) **5.5.2.** Calculation of unit costs in services	Development of service cost data in order to for a basis for further cost-effectiveness studies to be performed	Development of data set for service provision unit costs	**1.** Ministry of Health **2.** Ministry of Family and Social Policies **3.** Universities **4.** SGK **5.** NGO	1 years
5.6. Including private home care centre and units in Communiqué of Health Applications (CHA) with the establishment of the necessary supervision infrastructure by SGK	**5.6.1.** Development of necessary supervision infrastructure by Social Security Institution in order to pay the services of home health care service centres and units within the scope of CHA	Including the payment terms and scopes of private home health care units and centres in the scope of Communiqué of Health Applications (CHA)	**1.** Dissemination of service provision by private home care units and centres across the country, not only for the people who pay themselves **2.** Number of services included in CHA **3.** Number of the people receiving service from private health care units and centres	**1.** Ministry of Finance **2.** Ministry of Health **3.** SGK	3 years

Target 6- Meeting Educational Needs of Home Care Personnel and Developing Employment Policies					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
6.1. Developing education levels of health care and social service personnel involved in home care services in cooperation with the Ministry of Family and Social Policies	**6.1.1.** Determination of standards for the trainings of health and social service personnel playing role in home care, and formation of a common curriculum **6.1.2.** Arrangement of programs for in-service training **6.1.3.** Planning of refreshment trainings for trainees	A common curriculum and guideline on standards to be established for training programs	**1.** Increase in the number and in knowledge level of qualified home care personnel **2.** Number of trainings arranged **3.** Number of personnel who have received training	**1.** Ministry of Family and Social Policies **2.** Ministry of Health **3.** Universities **4.** NGO	3 years
6.2. More involvement of health care professionals specialized in the field of geriatrics (physicians, nurses, physiotherapists, etc.) in home health care services	**6.2.1.** Increasing the number of health care professionals specialized in the field of geriatrics and arranging quotas and permanent staff positions accordingly	Increase in the number of health care professional specialized in the field of geriatrics who serve in home care units/service	**1.** Increase in the number of health care professional specialized in the field of geriatrics play roles in home care services **2.** Increase in the quotas and permanent staff positions in the field of geriatrics in universities **3.** Number of geriatrics professional groups playing roles in home care services	**1.** Ministry of Health **2.** YOK **3.** Universities	3 years
6.3. Making improvements in the contribution of professional groups involved in home health care services to performance systems and working capitals	**6.3.1.** Defining Home Health Care Services as Specialized Health Care Service	Improving working conditions of professional groups serving in home health care services, taking to the level of the other specialized teams working in the institutions	Encouraging personnel to be involved in this team by improving the working conditions of the personnel in home health care teams	Ministry of Health	3 years

Target 6- Meeting Educational Needs of Home Care Personnel and Developing Employment Policies					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
6.4. Ensuring the education of the elderly receiving home health care services and their families	**6.4.1.** Formation and implementation of training programs intended for the different needs of the elderly receiving services and their families (chiefly health and social services) in keeping with the standards	Supporting the elderly in need of care and their families by means of training programs	**1.** Increase in the number of the trainee elderly **2.** Follow-up and evaluation of the implementation of trainings given to the family members	**1.** Ministry of Health **2.** Ministry of Family and Social Policies **3.** Ministry of Internal Affairs **4.** Universities **5.** NGO	3 years

1.4. IMPROVEMENT OF HEALTH CARE SERVICES FOR ELDERLY AND ENSURING FULL ACCESS TO HEALTH CARE SERVICES

Current Situation in the World and Turkey

In the changing structure of society, developing policies, ensuring full access to health and care services and meeting the requirements of elderly are essential to improve the quality of life of elderly, prevent the illnesses in old age and ensure their participation in the process.

According to the reports of Turkish Statistical Institute (TUIK) of 2007, 2008, 2009, 2010, 2011 and 2012 years, the population of the elderly in the total population is determined to be 7,1 percent, 6,8 percent, 7 percent, 7,2 percent, 7,4 percent and 7,5 percent respectively (19).

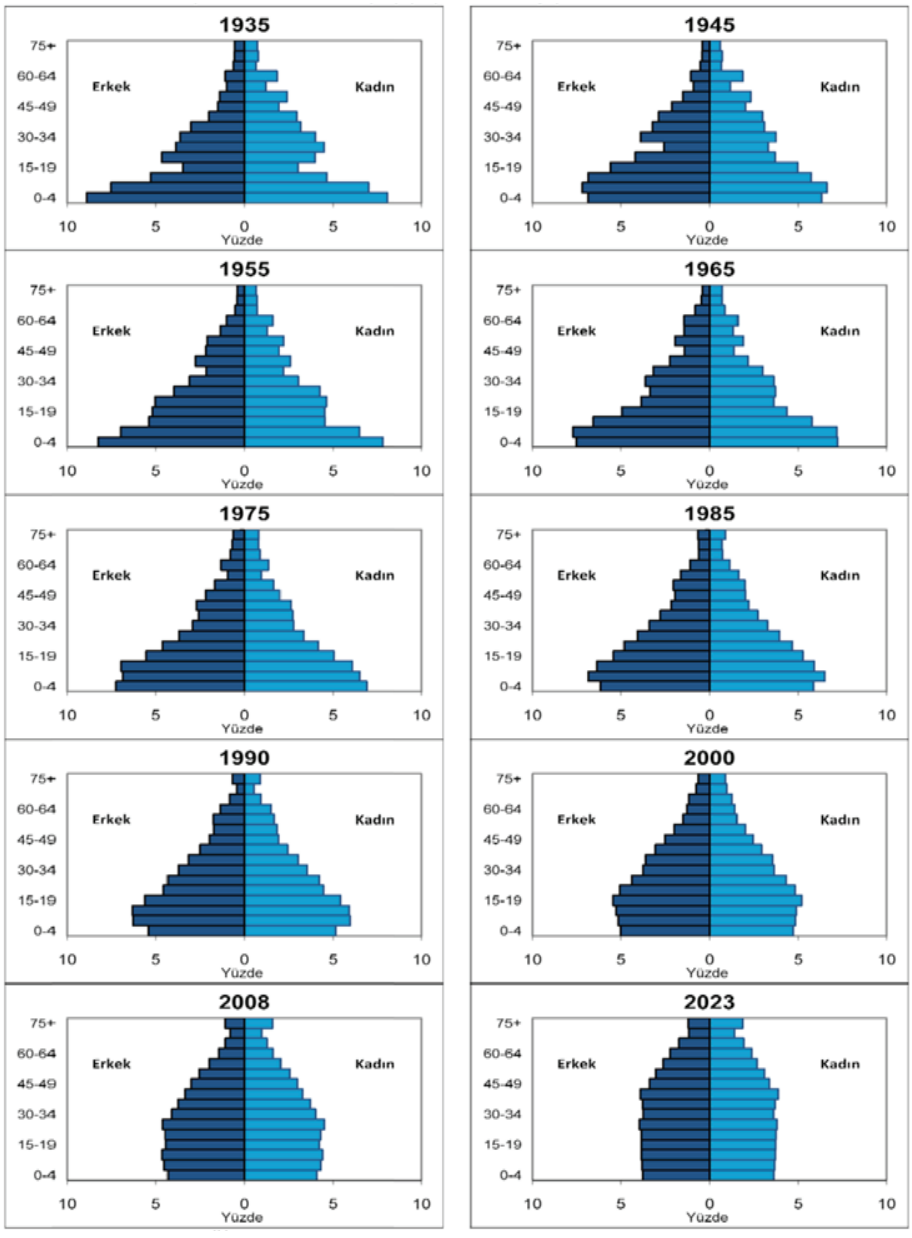


Figure 4. Change in Age and Gender Composition of the Population between 1935-2023 in Turkey

Source: TUIK, 1937, 1949, 1961, 1969, 1982, 1989, 2003, 2010b, 2010c

Table 4. General Demographic Information

	1990	2000	2010	2011	2012
Total Population	56.473.035	67.803.927	73.722.988	74.724.269	75.627.384
Rural Population Ratio (%)	48,7	40,8	29,0	28,2	27,7
Urban Population Ratio (%)	51,3	59,2	71,0	71,8	72,3
Population Ratio aged between 0-14 (%)	35,0	29,8	25,6	25,3	24,9
Population Ratio 65 years and above (%)	4,3	5,7	7,2	7,3	7,5
Youth Dependency Ratio (0-14 ages)	57,6	46,3	38,1	37,5	36,9
Old Age Dependency Ratio (65 + Above)	7,0	8,8	10,8	10,9	11,1
Total Dependency Ratio (%)	64,7	55,1	48,9	48,4	48,0
Annual Population Growth Rate (‰)	17,0	13,8	13,0	12,8	12,5
Approximate Birth Rate (‰)	24,1	20,3	17,5	17,3	17,0
Approximate Death Rate (‰)	7,1	6,6	6,3	6,3	6,3
Total fertility Rate (children per woman)	2,9	2,4	2,1	2,1	2,1

Source: TUIK, 1990 and 2000 Censuses and ABPRS Results of the years 2007, 2008, 2009 and 2010

When we look at the change in the age structure of the population of Turkey, due to the downward trend in fertility levels and improvement in the adverse conditions affecting the causes of death, it is evident that there will be a real transformation from young to old in the structure of population of Turkey. However, the aging of the population in Turkey is not a phenomenon that can be observed immediately. Depending on the increase in the population of 15-64 years which constitutes the population of working age over the course of time due to high fertility seen until recently, old age dependency ratio will not be negatively affected for a long period. Nevertheless, it is also essential to take the necessary measures and make the necessary adjustments in health and social assistance systems by considering the demographic transformation in advance.

The increase in the elderly population brings on physiological, psychological, social and economic problems. Aging of the population is a situation that has very different effects on socio-economic aspects of human life. In economic terms, an aging population affects economic growth, savings, investment and consumption, labour markets, pension funds, taxes and intergenerational transfers; health and health care services, family composition, lifestyle, housing and immigration status in social terms . All of these generate the risks of a reduction in labour supply (reduction in population of producers), increase in public spending (increase in health expenditure and social security payments) increased care needs (corporate and home care services).

Health and social services are required to be developed for improving the quality of life of elderly people in the changing structure of society, responding to their problems requirements and ensuring their social and family integration. Elderly health and active aging program is intended to be applied directly in primary health care.

It is important that this should include such advanced implementations as that the centres providing direct health service for elderly is easily accessible, implementation of positive discrimination for elderly, planning of healthy aging and active care services.

Developed by WHO, "Age-Friendly Primary Care Centre" is one of the projects involving advanced applications prepared for this purpose. Family Medicine that forms the basis for the provision of primary health care in our country was laid down to be compatible with the active aging approach in the best way with the definition of the WONCA (World Organization of National Colleges Academies) in Europe in 2002. According to this definition, family physicians are the physicians who are responsible for providing periodic and comprehensive care for every individual seeking medical care, not considering their age, gender and illness (20). They provide assistance for the individuals in the context of their families, cultures and societies, whilst performing this, they always respect the individual personality of the patient and have a professional responsibility to society.

Permanence principle in the geriatric population is important in family medicine. It is known that the elderly pay tribute to the long-term relationship with family physicians and do not change their family physicians until they die or move. However, protective, diagnostic, therapeutic and monitoring services should be promoted in performance-based payments. As generally recognized, chronic diseases may lead to results in irreversible outcomes in terms of health and finance when they become acute.

Target and Strategies towards the Improvement of Health Care for Elderly and Ensuring Full Access to Health Care

Target 1- Improvement of Health Care for Elderly

Strategy 1

Provision, maintenance and development of preventive health care services for elderly

Strategy 2

Increasing the quality diagnostic and treatment services for elderly

Strategy 3

Provision, maintenance and development of rehabilitation services

Strategy 4

Implementation of health, social and rehabilitation services for elderly by providing cooperation

Strategy 5

Improvement of the standards in the geriatrics departments and units of hospitals, geriatrics hospitals, rehabilitation centres and geriatrics care centres and elderly day care services providing health care services for elderly and opening of centres in accordance with these standards

Target 2- Ensuring Full Access to Health Care Service

Strategy 1

Ensuring that elderly can have equal access to health and care services in the universal standards, eliminating inequalities in access to care services and giving priority to the elderly individuals who have mental, social or economic difficulties in accessing to health, care and rehabilitation services

Strategy 2

Providing positive discrimination for elderly in health institutions

Target 3- Improvement of Welfare Strategy 1

Increasing satisfaction for health care providers and those receiving service with the quality of health care

1.4. Improvement of Health Care for Elderly and Ensuring Full Access to Health Care and Improvement of Welfare

Target 1-Improvement of Health Care for Elderly					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
1.1. Provision, maintenance and development of preventive health care services for elderly	**1.1.1.** Establishment of follow-up programs for elderly (at home, nursing homes, health care institutions) **1.1.2.** As pregnant women and children follow-up forms, involvement of elderly health follow-up forms in Family Physicians Information System (FPIS) **1.1.3.** Provision of additional payment for the personnel involved in the provision of elderly patient follow-up and preventive health care services **1.1.4.** Informing the community with printed and visual media against possible accidents **1.1.5.** Formation of vaccination program for the people above 65 years of age	**1.** As pregnant women and children follow-up forms, involvement of elderly health follow-up forms in FPIS **2.** Determination of the percentage of priority groups **3.** Vaccination ratio in the elderly population **4.** Number of the admitted patients above 65 years of age and geriatrics evaluation ratio	**1.** Decrease in morbidity and mortality **2.** Increase in the number of immunized elderly **3.** Analysis of FPIS registration (average follow-up, follow-up by provinces)	**1.** Ministry of Health **2.** SGK	1 year
1.2. Increasing the quality of diagnostic and treatment services for elderly	**1.2.1.** Training of personnel involved in elderly health service **1.2.2.** Increasing the number of health professionals specialized in their fields	**1.** Increase in the number of the elderly who are early diagnosed and receiving proper treatment **2.** Decrease in hospitalization rates and staying periods **3.** Number of the competent health care professionals	**1.** Reduction in morbidity and mortality **2.** Reduction in the long-term diagnosis and treatment costs	Ministry of Health	1 year
1.3. Provision, maintenance and development of rehabilitation services	**1.3.1.** Including geriatric rehabilitation in undergraduate and graduate education programs in the field of health	**1.** Number of health care professional trained in the field of geriatric rehabilitation **2.** Satisfaction surveys	Increase in the number of the elderly receiving geriatric rehabilitation	Ministry of Health	Periodic

Target 1-Improvement of Health Care for Elderly					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
1.4. Implementation of health, social and rehabilitation services for elderly by providing cooperation	**1.4.1.** Planning of meetings and congresses to be jointly held in order to ensure communication, collaboration and cooperation among institutions **1.4.2.** Strengthening and training the elderly and their relatives in the use and choice of health, social and rehabilitation services	**1.** Increase in the quality of service **2.** Increase in the number of patients and patient relatives who have received training on this subject **3.** Increase in the number of personnel who will provide these services **4.** Determination of service standards and cooperation between the services	**1.** Decrease in costs **2.** Elderly with enhanced quality of life **3.** Elderly and their families with decreased care problems **4.** Increase in the satisfaction of health care professionals and in job pleasure	**1.** Ministry of Health **2.** Ministry of Family and Social Policies **3.** Ministry of Internal Affairs **4.** SGK	1 year
1.5. Improvement of the standards in the geriatrics departments and units of hospitals, geriatrics hospitals, rehabilitation centres and geriatrics care centres and elderly day care services providing health care services for elderly and opening of centres in accordance with these standards	**1.5.1.** Planning of dissemination and improvement of public and private centres providing service for the needs of elderly **1.5.2.** Determination of standard of public and private centres providing service for elderly **1.5.3.** Establishment of the perception Age-Friendly Centre in primary, secondary and tertiary health care **1.5.4.** Ensuring regular supervisions in public and private institutions serving in the field of geriatric	**1.** Increase in the number of elderly benefitting from primary health care **2.** Increase in the number and activities of public and private centres providing service for elderly with the determined standards **3.** Increase in the quality of service	**1.** The number of elderly with enhanced quality of life **2.** Increase in the number of elderly having access to health care services **3.** Increase in the patients receiving treatment	**1.** Ministry of Health **2.** Ministry of Family and Social Policies **3.** Ministry of Development **4.** Universities	4 years

Target 2- Ensuring Full Access to Health Care Service					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
2.1. Ensuring that elderly can have equal access to health and care services in the universal standards, eliminating inequalities in access to care services	**2.1.1.** Dissemination of home follow-up and care service across the country,	**1.** Increase in the number of elderly having access to service **2.** Analysis of FPIS registration (average follow-up, follow-up by provinces) **3.** Results of satisfaction	**1.** Decrease in morbidity and mortality **2.** Increase in the life satisfaction of elderly	**1.** Ministry of Health **2.** Ministry of Family and Social Policies	1 year
	2.1.2. Including health and social support services contained in the service model (home medical monitoring and treatment, assistance at home, housekeeping, follow-up via phone, home catering, maintenance and repair) in the scope of insurance payments, and supervision of these services **2.1.3.** Collection of call centres in a single centre. Provision of assistance, consultancy and guidance services for elderly free of charge in all fields by establishing a phone assistance and consultancy line. Establishment of an emergency call centre for the elderly living at their homes or staying in the institutions by means of electronic warning or assisting devices **2.1.4.** Including the courses of elderly health care services in the curriculum of the educational institutions training health care professionals and supervision of these courses by supervising committee accredited at national and international level **2.1.5.** Establishment of mobile teams intended for elderly (medication distribution, social activity, nutrition, etc.) (carried out by local authorities)	**1.** Results of satisfaction and quality of life **2.** The number of mobile teams established	Increase in the quality of life	**1.** Ministry of Health **2.** Ministry of Family and Social Policies **3.** Ministry of Internal Affairs **4.** Ministry of National Education	3 years
2.2. Giving priority to the elderly individuals who have mental, social or economic difficulties in accessing to health care services	**2.2.** Giving priority to the elderly individuals who have mental, social or economic difficulties in accessing to health care services **2.2.1.** Increasing the number of institutions and organizations providing health, social and care services for elderly (depending of the local elderly population ratios)	Increase in the number of elderly having physical, mental, social or economic problems who receive services from organizations and institutions providing health, social and care services	Increase in the quality of life of elderly	**1.** Ministry of Health **2.** Ministry of Family and Social Policies **3.** Ministry of Internal Affairs	3 years
2.3. Providing positive discrimination for elderly in health institution	**2.3.1.** Establishment of age-friendly health centres and facilitation and priority for elderly to access to these services (ensuring that poor elderly can particularly get more out of these sources)	Increase in the number of age-friendly health centres	Increase in the satisfaction of life for elderly	**1.** Ministry of Health **2.** Ministry of Family and Social Policies	3 years

Target 3-Improvement of Welfare					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
3.1. Increasing satisfaction for health care providers and those receiving service with the quality of health care	**3.1.1.** Determination of job description of working staff **3.1.2.** Development of registration and information system in the provision of health care	**1.** Arrangement of legislations **2.** Increase in the number of registered patients **3.** Increase in the quality of service	**1.** Increase in the satisfaction of personnel **2.** Increase in the satisfaction of service providers and their families	**1.** Ministry of Health **2.** Ministry of Internal Affairs **3.** SGK **4.** NGO	Periodic
	3.1.3. Promoting the domestic and abroad training opportunities for working staff	Increase in the number of qualified health care professionals	Increase in the quality of service provided for elderly and in the satisfaction of service areas	Ministry of Health	Periodic
	3.1.4. Improving the motivation of working staff	Increase in the working motivation of the staff working in the field of elderly health	Number of health care professionals preferring to work in the field of elderly health	**1.** Ministry of Health **2.** Ministry of Family and Social Policies	Periodic

1.5. IMPLEMENTATION OF PLANS AND ACTIVITIES ON THE SUBJECT OF NEUROPSYCHIATRIC DISORDERS, DEMENTIA, GERIATRIC PSYCHIATRY, DISABILITY, ABUSE OF ELDERLY AND VIOLENCE IN OLD AGE

Current Situation in the World and Turkey

1. Neuropsychiatric Diseases, Dementia and Geriatric Psychiatry in Elderly

Dementia is a common problem in the elderly. Its incidence is 5 percent in over 65 years and 50 percent in over 80 years of age. Since the disease can start with an insidious forgetfulness, forgetfulness in old age cannot be seen as normal. Today, with the existing medications, the duration of going to the last point in the cases diagnosed in early stages can be extended, patient's self-care time can be extended and caregiver burden can be reduced (21).

The number of patients with dementia worldwide in 2010 was 35,6 million, this figure is estimated to rise to 65,7 million by 2030 and 115,4 million by 2050. The cost of dementia in the whole world was 604 billion dollars for the country economies in 2010, and 89 percent of this cost is stated to be covered by the developed countries. Given the prevalence of dementia as of 2010; 4,6 percent of the total population of Asia is expressed to suffer from dementia, 6,2 percent in Europe, 6,1 percent in Latin America, 6,9 percent in North America and approximately 4,7 percent of the population worldwide. When the countries having the patients with dementia are listed, China ranks in the first place with 5,4 million patients, the USA with 3,9 million, India with 3,7 million, Japan with 2,5 million, Germany with 1,2 million, Russia with 1,1 million, France and Italy with 1 million each, followed by Brazil with 1 million patients (22).

2. Abuse of Elderly, Negligence, and Violence against Elderly

According to the WHO, violence is defined as deliberate use of physical power and ferocity in an actual or threatening way against another individual, group or community which results in injury, death, psychological harm, loss or is likely to result in one of the foregoing predicaments (23).

Violence, while affecting all individual within a society, affects the elderly groups who are more vulnerable (24). In the world health report of the WHO of 1998, aging is defined as the increase of disability and being dependent to the others (25).

Violence against elderly is a common type of violence generally encountered in older age (75 and above). Old age is a period in which the dependence of individuals and risk of accidents increase, physical abilities decreases and many chronic diseases are experienced (26).

Abuse of Elderly

In general, abuse of elderly is defined as the whole physical and psychological behaviours causing negligence that brings about injury and abuse of elderly (27). More than 5 percent of the elderly population over 65 years of age in England is found to be orally ill-treated by their close relatives, 2 percent is physically ill-treated and 2 percent is economically ill-treated (28).

According to the report of the United States National Adult Protective Services Agency (APS- Adult Protective Services); abuse of elderly in the years 1986-1996 (from 117,000 cases to 293.000 cases) are reported to rise by 150 percent. In the United States (1979-1994), 60 percent of the crimes committed against the elderly is stated to be negligence and 15 percent to be physical abuse (29).

In our country, when we look at studies related to abuse of elderly; it is found that 26,6 percent of the elderly suffers physical abuse, the abusers is made up of their close relatives and 86,72 percent complains of the elderly and do not share this situation with other people (30).

Neglecting Elderly

Negligence is that the elderly experience emotional or physical difficulty in connection with the knowingly or unknowingly refusal or deferral of the fulfilment of care process by caregiver (failure to meet such requirements as nutrition, dressing, personal hygiene, heating, economic sources needed for elderly to maintain their daily lives, avoiding communicating, leaving alone for a long time, ignoring health care needs, not taking the finished drugs, ignoring the need for the use of assistive devices like hearing aids).

3. Disability

Disability is an ineffective situation of a person which is associated with physical and mental illnesses, defining an important situation with legal and clinical aspects that disrupts basic life activities (31). According to the International Classification of Functioning, Disability and Health (ICF), disability is defined as any limitations or restrictions on the ability of an individual to perform an activity within the acceptable limits (32).

Disability leads to the loss of works and social roles and the ability to take care of himself or herself which are expected from an individual to perform him and the loss of social relations and disruption of duties.

Social and legal consequences of this situation, which disrupts daily living activities, affect both the elderly and their environment. In addition to degradation of the quality of life, this leads to the formation of some new pathology and the new functional losses associated with this.

Practice on the Subjects of Neuropsychiatric Diseases, Dementia and Geriatric Psychiatry in Elderly

Department of Health of Britain and the United States and many Non-Governmental Organizations have web pages in order to inform the public of such common diseases as Alzheimer's disease, depression and neuropsychiatric disorders.

Implementations on the subject of Abuse of Elderly and Violence against the Elderly

Free telephone lines called “elder abuse hotline” have been opened in the United States to report the abuse of elderly. This phone line directs the callers to the units called the "elderly protection services." Similar phone lines are available in Australia, England, New Zealand and Canada. Upon complaints made by telephone, “Elderly Protection Services” units visit the home of the elderly and prepare a report If there is an abuse, the relocation of the elderly (admission to retirement homes, nursing homes, etc.) are carried out and criminal proceedings are initiated against the person who has carried out abuse. In addition,

when the address http://www.ncea.aoa.gov/index.aspx describes in detail as to how to react in case an abuse.

Implementations on the subjects of Disability

To prevent disability in the elderly, especially family physicians and nurses in primary health care in the United States and England in England make the elderly undergo screening at least once a year. This screening program includes the examination of cancer markers and application of vaccinations of the elderly and the recommendations based on the findings (regular exercise and dietary advice).

Target and Strategies towards Neuropsychiatric Disorders, Dementia, Geriatric Psychiatry, Disability, Abuse of Elderly and Violence in Old Age

Target 1- Ensuring provision of the necessary cooperation of all of the relevant institutions and preparing the conditions required for the elderly to receive the most effective, accurate and competent service in the diagnosis and treatment of neuropsychiatric disorders

Strategy 1

Ensuring permanent access of geropsychiatric patient to treatment

Target 2- Taking necessary measures and performing rehabilitation to prevent, diagnose and eliminate disability resulting from neuropsychiatric disorders in the elderly

Strategy 1

Ensuring the diagnosis of geropsychiatric disorders as a disability by physicians and health care professionals

Strategy 2

Ensuring the reduction of disability in the elderly and the community

Target 3- Taking necessary measures to prevent and identify abuse of the elderly intended for community, families and institutions

Strategy 1

Raising awareness of community about abuse and violence against elderly and violence

Strategy 2

Training health care professionals about elderly health and abuse and violence against elderly before and after graduation and increasing the service provision capacities

Strategy 3

Establishment of health care services for the elderly who have undergone abuse and violence

1.5. Implementation of Planning and Activities about Neuropsychiatric Disorders, Dementia, Geriatric Psychiatry, Disability, Abuse of Elderly and Violence in Old Age

Target 1- Ensuring provision of the necessary cooperation of all of the relevant institutions and preparing the conditions required for the elderly to receive the most effective, accurate and competent service in the diagnosis and treatment of neuropsychiatric disorders

Strategy	Activities	Output Indicators	Result Indicators	Responsible Institution and Organization	Period
1.1. Ensuring permanent access of geropsychiatric patient to treatment	**1.1.1.** Ensuring facilitation of the elderly in outpatient appointments **1.1.2.** Allotting waiting chairs to the elderly in outpatient waiting rooms **1.1.3.** That the clinics serving the elderly are on the first floor **1.1.4.** Allotting separate rooms to the elderly when performing their examination in polyclinics and giving priority in examination and check-up **1.1.5.** Allotting personnel to accompanying the elderly with dementia and geropsychiatric disorder who have come alone during the process	**1.** Number of patients accessing to physicians **2.** Number of the elderly who have been prioritized in polyclinics and examined in an easy and quality way **3.** Number of teams serving the elderly with geropsychiatric disorder	**1.** Increase in the number of patients accessing to physicians **2.** Increase in the number of number of the elderly who have been prioritized in polyclinics and examined in an easy and quality way **3.** Increase in the number of teams serving the elderly with geropsychiatric disorder	**1.** Ministry of Health **2.** Ministry of Family and Social Policies **3.** Ministry of Justice **4.** Ministry of Internal Affairs **5.** SGK **6.** Press and Broadcasting Institutions **7.** Departments of Geriatrics, Neurology and Psychiatry in Universities **8.** Private Hospitals **9.** NGO	2 years

Target 1-Ensuring provision of the necessary cooperation of all of the relevant institutions and preparing the conditions required for the elderly to receive the most effective, accurate and competent service in the diagnosis and treatment of neuropsychiatric disorders

Strategy	Activities	Output Indicators	Result Indicators	Responsible Institution and Organization	Period
1.1. Ensuring permanent access of geropsychiatric patients to treatment	**1.1.6.** In inpatient services; elderly geropsychiatric patients need more attention, personnel and medical equipment due to their chronic illness. Therefore, establishment of geropsychiatric services in universities and research hospitals. Establishment of the teams and provision of training for these teams that will serve the patients in these services Provision of facilities like "shelter" or "protection houses" for homeless geropsychiatric patients - Giving power and duties to the prosecutors and law enforcement units in order for the homeless elderly who suffer from dementia, and are without any relative and in need of housing to be placed in - For this situation, determination a common solution by Ministry of Health, Ministry of Internal Affairs, Ministry of Justice and Ministry of Family and Social Affairs **1.1.7.** Ensuring home care for geropsychiatric patients who are not likely to access to medication and health services	**1.** Number of the patients accessing to physicians **2.** Determination of institutions for being assigned to host the geropsychiatric patients who have no relative and are in need of housing **3.** Number of geropsychiatry services in universities and research hospitals **4.** Number of qualified teams providing service for geropsychiatric patients **5.** Number of protection houses **6.** Number of patients who can continuously access to medication **7.** Monthly and annually statistics of institutions related in housing **8.** Data study conducted with living quality scales **9.** Number of medications of geropsychiatric patients and reimbursement statistics **10.** Number of geropsychiatric patients who receive home care services **11.** Number of patients monitored in inpatient service	**1.** Increase in the number of the elderly accessing to physicians **2.** Increase in the placement of geropsychiatric patients who have no relative and are in need of housing in institutions **3.** Increase in the number of geropsychiatry service in universities and research hospitals **4.** Increase in the number of qualified teams providing service for geropsychiatric patients **5.** Increase in the number of protection houses **6.** Increase in the number of patients who can continuously access to medication **7.** Closely monitoring cost analysis studies of neuropsychiatric diseases	**1.** Ministry of Health **2.** Ministry of Family and Social Policies **3.** Ministry of Justice **4.** Ministry of Internal Affairs **5.** SGK **6.** Press and Broadcasting Institutions **7.** Departments of Geriatrics, Neurology and Psychiatry in Universities **8.** Private Hospitals **9.** NGO	2 years

Target 2- Taking necessary measures and performing rehabilitation to prevent, diagnose and eliminate disability resulting from neuropsychiatric disorders in the elderly					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
2.1. Ensuring the diagnosis of geropsychiatric disorders as a disability by physicians and health care professionals **2.2. Ensuring the reduction of disability in the elderly and creation awareness in the community**	**2.1.1.** Specialists and physicians serving in the field of geriatrics in universities and training and research hospitals who are actively assigned to arrange periodic training activities and courses and prepare printed and visual documents **2.2.1.** Arranging the activities in which the elderly can participate for increasing their physical activities, supporting the activities such events as chess tournaments, music events and physical exercise activities **2.2.3.** Ensuring the participation of the elderly in the activities in which cognitive rehabilitation is performed, supporting the learning process of the elderly by opening hobby courses, computer use, crafts and handicrafts, occupational therapy and reading courses **2.2.4.** Increasing the number of public gardens enhance physical exercise activities of the elderly **2.2.5.** Giving authority and support to municipalities to provide the activities **2.2.6.** Introducing elderly quotas for the cultural activities to be further performed (10 percent of audience) **2.2.7.** Providing on-line training programs for the elderly **2.2.8.** Providing 5 percent quota and establishing part-time working conditions for the persons over 65 years of age to serve in public and private institutions	**1.** Health care professional that can use evaluation scale intended for disability **2.** Increase in the out-of-home activities of elderly **3.** Re-planning of service provisions of municipalities intended for the elderly and increase in the service provision **4.** Increase in the service provision aimed at organizing the elderly **5.** Increase in the ratio of the use of health care services by the elderly **6.** Increase in the psycho-social levels of the elderly **7.** Increase in the participation of the elderly in the activities organized in provinces **8.** Increase in the volunteer and paid employment opportunities **9.** Increase in the publication in the media for the elderly	**1.** Advancement in recognition and prevention of disability **2.** Decrease in anxiety, depression and sleep disorders and increase in quality of life **3.** Increase in the problems of the patients with dementia and the families with dementia patients and decrease in the isolation of the patients from the community **4.** Increase in the elderly organizations and establishment of relevant institutions for elderly solidarity **5.** Increase in the ratio of the use of health care services by the elderly **6.** Decrease in morbidity of systemic and neuropsychiatric diseases **7.** Increase in the social communication of the elderly **8.** Increase in the productivity and social functioning of the elderly **9.** Increase in knowledge and awareness levels of the elderly and in the acquisition of knowledge	**1.** Ministry of Health **2.** Ministry of Family and Social Policies **3.** Ministry of Labour and Social Security **4.** Universities **5.** Press and Broadcasting Institutions **6.** NGO	4 years

Target 3- Taking necessary measures to prevent and identify abuse of the elderly intended for community, families and institutions					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
3.1. Raising awareness of community about abuse and violence against elderly	**3.1.1.** Campaigning to prevent the abuse and violence against elderly and to raise community awareness	**1.** Increase in the number of posters related to the subject of abuse and violence against elderly which are hanged on city boards **2.** Increase in the publications related to abuse and violence against elderly in printed and visual media **3.** Number of abuse and violence against elderly **4.** Number of elder abuse reported by physicians and health care professionals	**1.** Increase in the number of individuals reporting abuse and violence against elderly in community **2.** Decrease in abuse and violence against elderly in community	**1.** Ministry of Family and Social Policies **2.** Ministry of Health **3.** Ministry of Internal Affairs **4.** Press and Broadcasting Organizations **5.** NGO	Periodic
3.2. Training health care professionals about elderly health and abuse and violence against elderly before and after graduation and increasing the service provision capacities	**3.2.1.** Ensuring to include the subject of abuse and violence against elderly in the undergraduate curriculum of faculty of medicine, nursing, social services and other related disciplines **3.2.2.** Ensuring to include the subject of abuse and violence against elderly in the education of family physicians, emergency medicine, internal medicine, psychiatry and medical speciality **3.2.3** Including the subject of abuse and violence against elderly in the in-service trainings of health care professional intended for the elderly **3.2.4.** Preparation of information documents intended for health care professionals and distribution of these to all of the relevant institutions and organizations	**1.** Increase in the number of institutions that give place to this subject **2.** Number of specialization areas that give place to this subject in faculty of medicine curriculum **3.** Number of in-service trainings **4.** Number of information documents prepared and distributed	**1.** Increase in the number of reports about abuse and violence against elderly made by professionals serving in the field of elderly health **2.** Raising awareness of health care professionals about abuse and violence against elderly	**1.** Ministry of Health **2.** Ministry of Family and Social Policies **3.** YOK **4.** Universities **5.** NGO	2 years
3.3. Establishment of health care services for the elderly who have undergone abuse and violence	**3.3.1.** Making necessary promotions for elder abuse to be reported to Hotline ALO 183 **3.3.2.** Using approaches to early detect elder abuse in the home visits by primary health care family physicians and family health staff and social service specialists **3.3.3.** Creation of algorithm of service flow that will ensure that emergency staff can take appropriate approaches to the hospital admissions due to the trauma arising from abuse/violence **3.3.4.** Providing institutional support to the elderly placed in the institutions due to abuse and violence	**1.** Number of case of elder abuse and/or violence against elderly reported to hotline ALO 183 **2.** Number of elder abuse and violence detected by family physicians and social service specialists in home visits **3.** Number of elder abuse and violence which is detected in supervisions made to the institutions (providing service for elderly)	**1.** Number of the persons who have committed elder abuse and violence and have been rehabilitated **2.** Establishment of living conditions addressing the nest interests of elderly	**1.** Ministry of Family and Social Policies **2.** Ministry of Health	2 years

1.6. ENSURING ORGANIZATION IN ACUTE CARE AND EMERGENCY IN GERIATRICS

Current Situation in the World and Turkey

Increase in aging population brings about the increased access to and utilization of health care services for the elderly population. In this context, studies associated with how the elderly will benefit from a more effective and reliable emergency health care are increasing. Because emergency regulations in health care are in consistent with the level and development of health systems of countries.

As well as country, city and regional differences, such many factors as existing health system, localization of hospital and emergency departments, population characteristics of region and extent of ambulance network affect the rate of utilization of emergency departments. The rate of utilization of emergency departments in urban areas is higher than rural rates.

In recent years, the frequency of applying to emergency departments has been increasing, the elderly are often subject to negative discrimination in the crowd and fast cycles and the optimal intervention and initiatives are performed less, so the elderly is thought to respond less to treatment. That the elderly are special groups as children and the requirements of different approaches and assessment for them are now recognized all over the world. Because the elderly often have multiple disorders (multiple comorbidities). Symptoms and findings of chronic diseases may be obscure and show complex and atypical course. Besides, particularly the elderly applying to emergency department are usually found to have a reduction in cognitive and functional abilities. All of these reasons are required for the elderly to be evaluated with a different perspective in emergency departments than those of classical approach.

The elderly usually apply to emergency departments due to cardiovascular, cerebrovascular and metabolic disorders associated with chronic diseases or fulminant acute diseases. Therefore the elderly are admitted to hospital and monitored more than young people, period of hospitalization of the elderly is longer and they need 5-6 times more intensive care.

Although physicians and emergency medical technician are available in ambulance services of our country, new approaches are also required for ideal ambulance services. When providing ambulance services, as well as safe and fast transportation of the elderly to emergency department, the systems related to intervention at the scene and transmitting the information and data about the elderly to the hospital to be reached should be developed and the systems providing communication with emergency departments should be established and disseminated.

In relation to the period after ensuring the access of the elderly to emergency services, new models indented for the formation of geriatric emergency units have been started to be established and applied in different countries across the world. However, whereas geriatric polyclinic services are provided in outpatient clinics, a separate structure model for this is not currently exist in emergency services in our country.

When we look at the examples in the world and Turkey, the traditional emergency services are known to be localized on the ground floor of hospitals and to have poor conditions in terms of physical circumstances. The evaluation of the patients and emergency approach are in the form of the evaluation and interventions aimed at the existing diseases. However, this system is not a current application of the

elderly patients Today, in the modern concept of emergency services and in the applications of new geriatric emergency units to be established, the proper approach protocols on the basis of evidence-based medicine, staff training and physical space changes should be carried out. In this context, emergency department clinical staff should be trained in geriatrics and geriatric emergency medicine, should be informed of common geriatric syndromes, and awareness on these subjects should be provided. Structural changes and measures that can decrease the frequency of cases that may cause significant morbidity and mortality in the elderly, such as delirium, falls and pressure sores, should be established in emergency services,. The programs that decrease functional loss and iatrogenic complications which reduce long hospitalization periods should be developed. Physical space should not have a restricted area and should be in such a way to ensure optimal care of the complex geriatric patients and in a plan to provide optimal placement of the patients. As new buildings may be constructed, new arrangements, where available areas can be found, may be performed with appropriate modifications to the existing emergency service.

When we look at the examples in the world, the hospitals with geriatric emergency units are available in the US, Canada and Australia. In some of these emergency services, the presence of geriatricians is of top priority, and geriatric nurses are also serving in these units. These nurses apply comprehensive geriatric assessment to the elderly and provide necessary coordination in the event of discharge of these patients. Besides, they perform the necessary planning after discharge, direct the patients to the relevant institutions if necessary, and communicate with their families.

A geriatric consultation team has been established in a centre in Montreal, Canada. In this team are geriatricians, full-time nurses, part-time physiotherapist and occupational therapists. This team evaluate all of the elderly and make treatment and rehabilitation plans in a coordinated way.

In yet another centre located in Melbourne, Australia, interdisciplinary coordination team has been formed. This team has organized complex emergency assessment and discharge planning for elderly patients. Similar applications have been made in some hospitals in Italy. Emergency services in these centres are in the form of mixed emergency services and have been arranged in a way to allocate a certain number of beds to elderly patients. While geriatric emergency departments are being established in all these models, triage, clinical evaluation and treatment, discharge planning elements should be taken into consideration.

Geriatric emergency application model can be summarized in four stages;

- In the first stage, information about patients admitted to emergency department should be available.
- In the second stage, infrastructures related to transfer and automatic reception of the data related to the patient to and from hospital database should be established. The important data should be electronically registered in emergency service records by receiving from this database. For instance; by transferring such information of the patients as existing diseases, previous laboratory parameters, imaging tests, medications, allergy status, reasons for previous admissions to hospital, social and functional status and habits, comprehensive geriatric assessment of the patient can be accelerated.

- In the third stage, emergency room physician determine the proper diagnosis and create the treatment plan after the evaluations and examinations by discussing the patients themselves and their families. Since it is difficult for an emergency room physician to perform all of these himself or herself, a geriatric team should be established in an interdisciplinary approach.
- The physician of the patient, emergency room nurse or geriatric nurse if any, or other assistant health care professional should be available in this team.
- In the fourth and final stage, an emergency environment with minimum noise and maximum safety and comfort should be created. To attain this, urgent architecture and landscaping should be discusses and all structure should be arranged in a way to consider the elderly features, the patients and their relatives, emergency room physicians and employees should be ensured to be in a comfortable and relaxed environment. The appropriate consultation atmosphere, lightings and other instruments required for the patients should be ensured.

As a result; as all over the world, the elderly population is increasing in our country, and in parallel to this, particularly geriatric syndromes and chronic diseases show increase, bringing the new problems to agenda. Due to the exacerbations of these chronic diseases with increasing frequency or the addition of new acute diseases to this, the rate of geriatric applications to emergency services is increasing as well.

Therefore, new approaches and arrangements should be performed for more efficient, reliable and productive provision of emergency services for geriatric age groups and organization of these in a way to increase the quality of health care services.

Target and Strategies towards Ensuring Organizations of Acute Care and Emergency Services in geriatrics

Target 1- Creating awareness in community and all health care professionals about acute care and emergency services in geriatrics

Strategy 1

Dissemination of awareness about acute care and emergency services in geriatrics; ensuring cooperation with universities, public and private institutions and NGO's

Target 2- Ensuring to increase the quality of emergency health services provided for the elderly and to conduct these within the framework of accessibility and efficiency principles

Strategy 1

Taking measures to provide positive discrimination towards the elderly in emergency services

Strategy 2

Establishing geriatric emergency departments in our country

Strategy 3

Rearrangement of the existing emergency services in a proper way in terms of appropriate approach to geriatric patients

Target 3- Provision of trainings related to the differences in emergence, diagnosis and treatment of the acute complications of chronic diseases in the elderly, and establishment of standardization towards approaches to the geriatric patients

Strategy 1

Creating algorithm in diagnosis and treatment of the elderly patients in emergency services

Strategy 2

Ensuring to arrange certified training programs and courses under the coordination of Ministry of Health, universities and relevant specialist associations

Target 4- Ensuring that the geriatric patients admitted to emergency service can access to health registration

Strategy 1

Provision of common health registration and database for all patients

Target 5- Preventing unnecessary drug use in geriatric patients and ensuring effective drug use

Strategy 1

Determining the medication used by the elderly patient admitted to emergency services, detecting unnecessarily use of medication with inappropriate doses and preventing polypharmacy

1.6. Ensuring Organization of Acute Care and Emergency Services in Geriatrics

Target 1- Creating awareness in community and all health care professionals about acute care and emergency services in geriatrics					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
1.1. Dissemination of awareness about acute care and emergency services in geriatrics; ensuring cooperation with universities, public and private institutions and NGO's	**1.1.1.** Holding academic meetings on approaches to acute geriatric patients **1.1.2.** Training health care professionals on geriatric approaches by organizing local seminars **1.1.3.** Preparation of advertising and promotional posters and films	**1.** Number of emergency room physicians and health care professionals with enhanced awareness about the evaluation of elderly patient **2.** Creation of awareness in community	**1.** Creation of emergency room physicians and health care professionals with enhanced awareness about the evaluation of elderly patient **2.** Social awareness surveys (to be performed for a period of 5 years) **3.** Increase in social awareness of the patients admitted to emergency services	**1.** Ministry of Health **2.** Universities **3.** Press and Broadcasting Organizations **4.** NGO	1 year

Target 2- Ensuring to increase the quality of emergency health services provided for the elderly and to conduct these within the framework of accessibility and efficiency principles					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
2.1. Taking measures to provide positive discrimination towards the elderly in emergency services **2.2. Establishing geriatric emergency departments in our country** **2.3. Rearrangement of the existing emergency services in a proper way in terms of appropriate approach to geriatric patients**	**2.1.1.** Establishment of geriatric emergency units in emergency departments in the hospitals under Ministry of Health and universities and completion of their physical infrastructure **2.2.1.** Increasing the number of personnel to provide geriatric health care services in emergency services, implementing the encouraging activities for personnel (performance, night shift premiums, leaves and etc.) **2.3.1.** Integration of geriatric emergency units with home care units	**1.** Including geriatric emergency units in the hospital projects to be constructed **2.** Completing restructuring works to be performed in the existing hospital in a short period **3.** Establishing geriatric emergency units in the emergency departments in certain hospitals **4.** Decreasing staying period in emergency services	**1.** Number of the hospitals with geriatric emergency services **2.** Increase of the satisfaction of the elderly admitted to emergency services **3.** Decrease in the rate of mortality	**1.** Ministry of Health **2.** Universities	1 year

Target 3- Provision of trainings related to the differences in emergence, diagnosis and treatment of the acute complications of chronic diseases in the elderly, and establishment of standardization towards approaches to the geriatric patients					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
3.1. Creating algorithm in diagnosis and treatment of the elderly patients in emergency services **3.2. Ensuring to arrange certified training programs and courses under the coordination of Ministry of Health, universities and relevant specialist association**	**3.1.1.** Training of emergency room physicians, health care professionals and 112 ambulance staff **3.1.2.** Establishment of a commission to create algorithm in diagnosis and treatment of the elderly patients in emergency services **3.2.1.** Performing in-service trainings at periodic intervals	**1.** Formation of positive differences in approach of emergency room professionals to the elderly patients in diagnosis and treatment stages **2.** Number of certified personnel	**1.** Ensuring standardization in approaches of emergency room professionals to geriatric patients **2.** Satisfaction surveys **3.** Decrease in mortality and morbidity	**1.** Ministry of Health **2.** Universities **3.** Relevant Specialist Associations	To be applied within 1 year and implemented at periodic intervals

Target 4- Ensuring that the geriatric patients admitted to emergency service can access to health registration					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
4.1. Provision of common health registration and database for all patients	**4.1.1.** Dissemination of common health registration database and integration of this with hospital automation systems	Able to access to patient records	Dissemination of use of patient records in determining the sustainable health policies	**1.** Ministry of Health **2.** SGK	1 year

Target 5- Preventing unnecessary drug use in geriatric patients and ensuring effective drug use					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
5.1. Determining the medication used by the elderly patient admitted to emergency services, detecting unnecessarily use of medication with inappropriate doses and preventing polypharmacy	**5.1.1.** Entering the medications used by the patient in the database to be established and updating these	Easy access to medications, reports and usage of the patients in the health database to be established	**1.** Preventing polypharmacy in the elderly and decreasing the hospital admissions accordingly **2.** Evaluation of prescriptions in the database of SGK and Ministry of Health	**1.** Ministry of Health **2.** SGK	2 years

1.7. PROVISION OF APPROPRIATE AND EFFECTIVE PRACTICE OF DIAGNOSIS, TREATMENT, MONITORING SERVICES IN OLD AGE

Current Situation in the World and Turkey

With the effects of rapidly evolving technology and scientific studies that increase day by day, significant advances in health care have been recorded. Early diagnosis is important to distinguish the findings related to diseases with aging-associated physiological changes occurred in organs. Early diagnosis is to detect illnesses or health problems through examination and laboratory methods before they clinically occur. The aim is to improve the quality of life, to reduce morbidity and mortality reduction and to decrease the cost of treatment.

For this purpose, the original tests to be selected in screening should have the following characteristics;

- Disease to be screened should be a common health problem in the community
- Disease should be able to be recognized by examination and laboratory tests before they demonstrate clinical signs.
- When detected early, it should contribute to the success of treatment and life span of the patient.
- Natural history of the disease to be screened should be well known.
- When diagnosed in early period, disease can be treated.
- Screening method should be reliable and acceptable to the patient.
- Sensitivity and specificity should be proper and sufficient.
- Screening test should be accessible to every section of the community.
- It should be cost-effective.

Hypertension, type 2 diabetes mellitus, dyslipidaemia, abdominal aortic aneurysm, obesity and nutrition problems, breast, colon, cervix, prostate and other cancers, depression, Alzheimer's disease, dementia, Chronic Obstructive Pulmonary Disease (COPD), Visual-auditory problems, osteoporosis in elderly, violence against elderly and associated problems, accidents and injuries, hepatitis B and tuberculosis of infectious diseases are among the health problems that can be diagnosed early.

Appropriate and correct evaluation of geriatric patients is possible with the Comprehensive Geriatric Assessment. Comprehensive Geriatric Assessment; is a team assessment that can describe and reveal various problems in the elderly, explain and classify reserves and resilience of individuals, and determine the services required to respond to the individual's problems and develop a co-ordinated treatment plan.

Revealing diseases that can be hidden, helping definite diagnosis, planning and implementing appropriate care, providing consultancy for optimum environmental and social support, monitoring the progress of the disease by anticipating results, protecting and improving the functional level and reducing costs in hospitalization, mortality, nursing home needs can be possible as a result of Comprehensive Geriatric Assessment.

In the evaluation of geriatric patients, the concepts of interdisciplinary and multidisciplinary teams are important. In evaluation of the elderly, evaluation and monitoring conducted by an interdisciplinary

geriatric team specialized in different fields instead of one person is a modern thought carried out in the world.

Interdisciplinary team members are comprised of;

- Geriatric specialist or, if not available, internal medicine
- Nurse
- Social Worker
- Dietician
- Psychologist
- Occupational Therapist
- Physiotherapist

Interdisciplinary team members determine the patient's treatment plan by evaluating the patient together. When the elderly's health is considered to be determined as three parts, physical, mental and social; how important the concepts of roles, functions and team spirit of the team members for evaluation of the elderly, protection of the elderly health, treatment of the disease will be is understood. Whereas the team is generally guided by geriatrician and elderly nurse, the role, place and mission of each person of the team is different and complementary. Social service specialist, nurses, physiotherapists, occupational therapists, psychologists, audiologists, dentists, pharmacists, speech therapists and nutrition should be included in and ideal team.

Although elderly patients do not constitute the majority of the population, they have become the most frequent users of medications in the society. While they constitute 13 percent of the total population in the US, about 30 percent of prescribed drug belongs to the elderly population (33). In community-based researches, it is found that the elderly people use daily average of 1,5 to 2,2 drugs, most of them are cardiovascular, central nervous system and analgesic drugs. In a study involving 2,500 patients, the most medication is observed to be used in the women older than 65 years, 12 percent of which is found to use at least ten drugs and 23 percent at least five drugs. Although aged over 60 is representing one fifth of the entire population in the UK, this group includes 52 percent of all prescriptions (34, 35).

Although there is no precise idea of a common definition for polypharmacy, it usually means the usage of lots of medication for multiple indications at the same time (36). Polypharmacy may be appropriate or inappropriate. Due to overprescribing of drugs, prescribing drugs that have unacceptable side effects for patients, prescribing simultaneously drugs that can harm with drug-drug and drug-disease interactions and several reasons, polypharmacy may be inappropriate.

In a study wherein 1253 patients were assessed in Hacettepe University Faculty of Medicine, Internal Medicine Department, Geriatrics Unit clinics, the average number of 3,79 of medications is found to be used before the patients' visit to polyclinics and the average number of 6,13 of medications is found to be suggested to the patients after clinic assessment (37).

One of the most important problems that may be caused by polypharmacy is the side effects and interactions of drugs. This problems result in drug incompatibility, increased risk of hospitalization,

medication errors and the increased cost of medication due to the treatment of side effects of the drugs. The more medication, the higher probability of occurrence of side effects.

While polypharmacy can be seen at any age, its incidence increase in the elderly. The excess of comorbidities in the elderly population leads to multiple drug prescribing and potentially dangerous results of polypharmacy. The inappropriate drug prescribing was found in 12-40 percent of patients staying in nursing homes and 14-23,5 percent of the patients living in the community (38, 39). Other risk factors for polypharmacy are the elements related to age, sex, lifestyle and caregiver of patients.

As the number of drugs used by patients increases, so the risk of side effects increases exponentially. While the risk of potential adverse effects of the use of two drug is 6 percent, this rate reaches up to 50 percent in the use of five drugs and almost reaches up to 100 percent in the use of more drugs (40). With the presence of multiple comorbidities that render the elderly more sensitive to drug-drug interactions and drug side effects, there are many factors such as the change in the pharmacokinetics and pharmacodynamics of the drugs due to aging-associated physiological changes (41). Drug side effects are among the serious health problems that can be prevented after heart disease, breast cancer, hypertension and pneumonia (42). The number of drugs received has a linear relationship with the frequency of side effects. However, whether side effects of medication are due to a drug-drug interaction or a drug received cannot be determined clearly

Another important consequence of polypharmacy is the increase in hospital admissions and hospitalizations. According to a meta-analysis, four times as much elderly people are hospitalised by adverse drug reactions related problems than non-elderly. On the other hand, the cause of 18- 24 percent of hospitalizations in the elderly is serious drug side effects and complications (43). 6-21 percent of the standing of the applicant, if the applicant in patients hospitalized constitute 18-24 percent of the drug's side effects and complications (44-45). In a study conducted in Canada, iatrogenic syndrome due to polypharmacy was found to be responsible for 19 percent of hospital admissions in the elderly (46).

In another study, it was found that 7 percent of hospital admissions is due to drug-related and 2/3 of these can be avoided (47).

Fall caused by polypharmacy is an important cause of morbidity and mortality in respect of their consequences. Falls occur in 1/3 of the population over 65 years of age and half of them occurs again. Fall caused by polypharmacy cases is more common in those taking four or more drugs and using serotonin reuptake inhibitors, tricyclic antidepressants, neuroleptics, benzodiazepines, anticonvulsants, class IA antiarrhythmic agents, digoxin and diuretic. Occurring in hospitalized patients due to many reasons, delirium, whose formation has been shown to be caused by means of the important role of polypharmacy, is an important problem that increases mortality and hospitalization period and decrease the functionality of patients. In the studies, polypharmacy is shown to a well-known cause in the etiology of delirium and to be particularly striking as an independent risk factor for those taking three and more medications (48, 49, 50).

As a result; polypharmacy is one of the important geriatric syndromes seen quite often in the elderly in both developed and developing countries which increase morbidity, mortality and costs, and impair the quality of life. Appropriate geriatric assessment with interdisciplinary approach should be performed to try to reduce polypharmacy.

Target and Strategies towards ensuring the proper and effective functioning of diagnosis, treatment, Monitoring Services in old age

Target 1- Promotion of national geriatric diagnosis and treatment guidelines

Strategy 1

Ensuring the use of geriatric diagnosis and treatment guidelines

Target 2- Ensuring the policies for "Rational Use of Medicines" in the elderly

Strategy 1

Organizing training activities in the light of international guidelines to develop the policies for rational use of medicines

Strategy 2

Ensuring the share of medical information belonging to the elderly within the ethical framework by considering the privacy of patient

Strategy 3

Developing medication monitoring system that foresees the follow-up of drugs from manufacturer to end user

Strategy 4

Decreasing polypharmacy

Target 3- Determining the problems related to the proper diagnosis of elderly diseases

Strategy 1

Performing Comprehensive Geriatric Assessment to reduce the problems in diagnosis in the elderly

Target 4- Ensuring the researches for diagnosis and treatment of the diseases affecting elderly

Strategy 1

Ensuring proper infrastructure and funding for research

Target 5- Ensuring solutions for reimbursement problems in diagnosis, treatment and follow-up

Strategy 1

Eliminating the problems of reimbursement of drug costs, access to treatment, prescribing and reporting of the elderly

Target 6- Ensuring the development of diagnosis and treatment with postgraduate trainings

Strategy 1

Increasing training activities to develop diagnosis and treatment

Target 7- Ensuring geriatric assessment in a comprehensive way by sparing sufficient time

Strategy 1

Establishing interdisciplinary geriatric team

Strategy 2

Ensuring continuity in the quality and accessible provision of Comprehensive Geriatric Assessments

1.7. Provision of Appropriate and Effective Practice of Diagnosis, Treatment, Monitoring Services in old age

Target 1- Promotion of national geriatric diagnosis and treatment guidelines					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
1.1. Ensuring of national geriatric diagnosis and treatment guidelines	**1.1.1.** Organizing regular training and promotions for the usability of diagnosis and treatment guidelines **1.1.2.** Performing the training and monitoring of Rational use of medicines **1.1.3.** Cooperation with SGK to take into account the guidelines in the reimbursements **1.1.4.** Re-assessment of such issues as Comprehensive Geriatric Assessment, screening tests, scales, elderly patients examination, family interviews, education of patient and relatives in performance evaluation system of Ministry of Health	**1.** Increase in the number of trained physicians **2.** Increase in the number of the elderly that can access to the medically recommended treatment **3.** Increase in the number of the accurately diagnosed elderly **4.** Arranging the performance system for geriatric patients	**1.** Increase in accurate diagnosis and proper treatment related to diseases **2.** Evaluation of prescription numbers in the database of SGK and Ministry of Health	**1.** Ministry of Health **2.** SGK **3.** Universities	Periodic

Target 2- Ensuring improvement of the policies for "Rational Use of Medicines" in the elderly					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
2.1. Organizing training activities in the light of international guidelines to develop the policies for rational use of medicines **2.2. Ensuring the share of medical information belonging to the elderly within the ethical framework by considering the privacy of patient** **2.3. Developing medication monitoring system that foresees the follow-up of drugs from manufacturer to end user** **2.4. Decreasing polypharmacy**	**2.1.1.** Organizing trainings intended for rational use of medicines by relevant institutions **2.1.2.** Including rational use of medicines education in the curricula of faculty of medicine, dentistry and pharmacy **2.2.1.** Ensuring detection and verification of the drugs that are used by the elderly in their each application to the hospital **2.3.1.** Ensuring the regular exchange of information with pharmacologist; establishing programs with the purpose of reducing drug interactions **2.4.1.** Providing information to the patient about the name, dosage and usage intervals, potential adverse effects of the medications used	**1.** Decrease in the number of drug usage **2.** Decrease in side effects of drugs **3.** Decrease in health costs per patient **4.** Increase in quality of life	**1.** Decrease in unnecessary applications to health care institutions and organizations **2.** Decrease in unnecessary usage of drugs in family practice information systems **3.** Monitoring costs in SGK database **4.** Implementation of satisfaction surveys	**1.** Ministry of Health **2.** SGK **3.**YOK **4.** Universities **5.** NGO	Periodic

Target 3- Determining the problems related to the proper diagnosis of elderly diseases					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
3.1. Performing Comprehensive Geriatric Assessment to reduce the problems in diagnosis in the elderly	**3.1.1.** Dissemination of comprehensive geriatric assessment **3.1.2.** Evaluation of the elderly by interdisciplinary team **3.1.3.** Implementation of immunization and screening intended for the elderly in an effective way **3.1.4.** Re-assessment of such issues as Comprehensive Geriatric Assessment, screening tests, scales, elderly patients examination, family interviews, education of patient and relatives in performance evaluation system of Ministry of Health	**1.** Increase in the period of diagnosis **2.** Implementation of proper techniques and methods in diagnosis **3.** Number of immunized elderly **4.** Number of elderly undergoing CGA (comprehensive geriatric assessment)	**1.** Decrease in unnecessary test spending **2.** Early diagnosis of diseases **3.** Increasing preventive medicine applications **4.** Faster definitive diagnosis **5.** Reduction in mortality and morbidity rates **6.** Decrease in hospitalization periods **7.** Decrease in the number of hospital applications **8.** Increase in the frequency of diagnosis of geriatric syndromes	**1.** Ministry of Health **2.** SGK **3.** Universities	1 year

Target 3- Determining the problems related to the proper diagnosis of elderly diseases					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
3.1. Performing Comprehensive Geriatric Assessment to reduce the problems in diagnosis in the elderly	**3.1.5.** Use of diagnostic methods in primary health care in appropriate way **3.1.6.** Facilitation of access of the elderly to health care institutions **3.1.7.** Provision of necessary support to facilitate the examination and treatment of the elderly without hospital attendant in the health institutions **3.1.8.** Determination and dissemination of standards in the fields of image communications, tele-medicine and tele-health **3.1.9.** Provision of information exchange between physicians for accurate diagnosis by establishing information and communication platform via portal	**1.** Acceleration in diagnosis process **2.** Prevention of unnecessary examination **3.** Number of immunized elderly patients **4.** Number of elderly undergoing CGA (comprehensive geriatric assessment)	**1.** Decrease in unnecessary test spending **2.** Early diagnosis of diseases **3.** Increasing preventive medicine applications **4.** Faster definitive diagnosis **5.** Reduction in mortality and morbidity rates **6.** Decrease in hospitalization periods **7.** Decrease in the number of hospital applications **8.** Increase in the frequency of diagnosis of geriatric syndromes	**1.** Ministry of Health **2.** SGK **3.** Universities	3 years

Target 4-Ensuring the researches for diagnosis and treatment of the diseases affecting elderly					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
4.1. Ensuring proper infrastructure and funding for research	**4.1.1.** Making necessary arrangements to boost investments **4.1.2.** Enhancing cooperation in the field of health researches between public and private sectors at every level to promote these investments **4.1.3.** Increasing the funds allocated for researches of Ministry of Health and Universities on elderly **4.1.4.** Performing reliability and validity of the tests used for Comprehensive Geriatric Assessment	**1.** Number of qualified researches **2.** Establishment of database intended for the elderly in our country	**1.** Increase in academic publications **2.** Activating and renewing diagnosis and treatment methods **3.** Provision of reliable data related to the diseases and functionality of the elderly	**1.** Ministry of Health **2.** Universities **3.** NGO **4.** Private Sector	3 years

Target 5- Ensuring solutions for reimbursement problems in diagnosis, treatment and follow-up					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
5.1. Eliminating the problems of reimbursement of drug costs, access to treatment, prescribing and reporting of the elderly	**5.1.1.** Establishment of a separate geriatric sub-committee under reimbursement commission **5.1.2.** Rearrangement of evaluation tests used in diagnosis and treatment of the elderly in performance system of Ministry of Health	**1.** Eliminating the problems occurred in the reimbursement system when some medicines used in the treatment of elderly are prescribed by geriatric patients **2.** Eliminating the problems occurred in the performance system	**1.** Eliminating the reimbursement problems related to medications **2.** Increasing the number of evaluation tests used in the diagnosis and treatment of the elderly **3.** Increase in the diagnosis of geriatric syndromes	**1.** Ministry of Health **2.** SGK **3.** Universities **4.** NGO	1 year

Target 6- Ensuring the development of diagnosis and treatment with postgraduate trainings					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
6.1. Increasing training activities to develop diagnosis and treatment	**6.1.1.** Organizing courses for health care professionals serving in elderly care in cooperation with relevant associations	**1.** Number of organized courses **2.** Increase in the number of elderly who have been accurately diagnosed and treated	**1.** Increase in implementation of accurate diagnosis and treatment of elderly diseases **2.** Efficient use of the sources for diagnosis and treatment	**1.** Ministry of Health **2.** Universities **3.** NGO	Periodic

Target 7- Ensuring geriatric assessment in a comprehensive way by sparing time					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
7.1. Establishing interdisciplinary geriatric team **7.2. Ensuring continuity in the quality and accessible provision of Comprehensive Geriatric Assessments**	**7.1.1.** Ensuring efficient training for the professionals in the interdisciplinary team **7.1.2.** Implementation of geriatric assessment in line with the diagnosis and treatment guidelines **7.2.1.** Rearrangement of such issues as Comprehensive Geriatric Assessment, screening tests, scales, elderly patients examinations, family interviews, education of patient and relatives in performance evaluation system of Ministry of Health **7.2.2.** Ensuring facilitation in appointments of elderly and giving priority to their hospital admissions **7.2.3.** Ensuring ease of transportation to elderly to reach health institutions **7.2.4.** Provision of necessary personnel support for ease of diagnosis and treatment to the elderly without hospital attendant	**1.** Dissemination of comprehensive geriatric assessment **2.** Increase in the number of interdisciplinary geriatric teams	**1.** Enhanced awareness about geriatric syndromes **2.** Enhanced quality of life in elderly **3.** Reduction in mortality and morbidity rates **4.** Reduction in cost of diagnostic tests **5.** Reduction in hospitalization periods	**1.** Ministry of Health **2.** Ministry of Internal Affairs **3.** Universities **4.** NGO	3 years

1.8. ARRANGEMENT OF TRAINING OF HEALTH CARE PROFESSIONALS AND HEALTH CARE PROVIDERS

Current Situation in the World and Turkey

While the population aged over 65 years in our country was 7,5 percent in 2012, it is estimated to rise to 20,8 percent by 2050 and 27,7 percent by 2075 (1). In 2025, the population over 65 years throughout the world is stated to constitute 10 percent of the world's population, reaching 800 million (51).

Elderly population in western countries constitute 15 percent of the total population. However, this 15 percent part utilizes more than 50 percent hospital admissions and about 40 percent of health sources. 30 percent of the spending of the US Medicare is used by a very small part as 6 percent (terminally ill elderly) (52). In parallel with the growing elderly population, the need for trained staff as well as institutions and organizations providing services to the elderly is increasing. The training of qualified professionals serving the elderly about elderly health and services to be provided is becoming more of an issue.

It is known that the WHO initiated a study in 1999 in order for the students of medical schools all over the world to identify geriatric issues and to assess their attitudes towards the elderly. Local representatives of the medical faculties from 79 countries, in which Turkey is also included, took part in this study and the results were published in 2002 (53). In the light of the data obtained from this study, such recommendations as creation of pilot models considering cultural differences, understanding the importance of healthy and active aging, taking social and political measures to perform this as well as focusing on issues related to geriatrics in training programs in medical schools were listed.

In the studies conducted abroad, geriatric training given in the undergraduate period was shown to affect the skills and attitudes related to students' approaches to the elderly in a positive direction (54, 55). In the European Union, in the light of the policies produced by the EAMA (European Academy for Medicine of Ageing) and the EUGMS (European Union Geriatric Medicine Society) dealing with geriatrics, the issues that are envisaged to be mainly targeted in undergraduate and postgraduate education issues are empathy with the elderly, healthy aging, interdisciplinary teamwork and approaches to ethical and geriatric syndromes. As in many countries, geriatrics, whether it may be discipline or not in our faculties, is included in undergraduate medical education program in our country (56).

The final declaration of the Study Group of European Academy of Yuste Foundation regarding the need for geriatric education in European countries was presented on 8-9 June 1998. In this declaration having the characteristics of a guideline, in what manner geriatric training will be contained within the educations of other specialization areas, and in-service trainings in geriatrics are discoursed. With such training, change and adaptation of students among European countries in both undergraduate and postgraduate periods are stated to be facilitated (57).

Target and Strategies towards Arrangement of Training of Health Care Professionals and Health Care Provider

Target 1- Including the education of geriatrics and gerontology in the curricula of medical faculties

Strategy 1

Including the education of geriatrics and gerontology in the curricula of medical faculties and disseminating this throughout the country

Target 2- Ensuring the presence of the qualified medical personnel providing services to the elderly

Strategy 1

Including the education of geriatrics and gerontology in the curricula of the relevant departments of the universities that educate the nurses, social workers, dieticians, psychologists, physiotherapists and occupational serving the elderly, and disseminating this throughout the country

Target 3- Promotion of sub-specialization in geriatrics

Strategy 1

Disseminating the sub-specialization in geriatrics under the department of internal medicine of the medical faculties throughout all of the universities and training and research hospitals

Target 4- Organizing geriatric training intended for primary health care physicians

Strategy 1

Allowing for geriatric rotation in the trainings of family practice specialization and adding and updating geriatric module in Remote Health Training System (RHTS) trainings

Target 5- Organizing geriatric training for health care professionals (physicians, geriatricians, geriatric nurse, social worker, dietitian, psychologist, physiotherapist, occupational therapist)

Strategy 1

Starting and developing the training programs for the health care professionals (physicians, geriatricians, geriatric nurse, social worker, dietitian, psychologist, physiotherapist, occupational therapist) and caregivers serving the elderly in coordination with the relevant institutions, ensuring the periodicity of the training, training the personnel in effective communication techniques with the elderly and supporting the associated projects

Target 6- Organizing the training of the caregivers serving the elderly, apart from health care professionals (physicians, geriatricians, geriatric nurse, social worker, dietitian, psychologist, physiotherapist, occupational therapist)

Strategy 1

Ensuring a periodic standard training with a holistic approach related to psychological, social aspects of the elderly for the families, family relatives, caregivers and other persons apart from health care professionals that provide care services to the elderly, and carrying out necessary organizations

Target 7- Ensuring rational use of medicines in the elderly

Strategy 1

Ensuring training for all of the health care professionals serving the elderly about rational use of medicines

Target 8- Raising awareness of health aging in the elderly

Strategy 1

Performing awareness works about healthy aging, physiological aging, diseases and rational use of medicines intended for the elderly in coordination with the relevant institutions and organizations

Target 9- Certifying the health care professionals serving the elderly

Strategy 1

Developing certified training programs about monitoring and care of the elderly for the health care professionals (physicians, geriatricians, geriatric nurse, social worker, dietitian, psychologist, physiotherapist, occupational therapist) serving the elderly

Target 10- Disseminating effective teamwork

Strategy 1

Disseminating and implementing the concept of interdisciplinary geriatric team (geriatrics physician, nurse, social worker, dietitian, psychologist, physiotherapist etc.)

1.8. Arrangement of Training of Health Care Professionals and Health Care Providers

Target 1- Including the education of geriatrics and gerontology in the curricula of medical faculties

Strategy	Activities	Output Indicators	Result Indicators	Responsible Institution and Organization	Period
1.1. Including the education of geriatrics and gerontology in the curricula of medical faculties and disseminating this throughout the country	**1.1.1.** Renovation and expansion of geriatric and gerontology training program **1.1.2.** Establishing and increasing the number of geriatric disciplines in all medical faculties **1.1.3.** Dissemination of geriatric and gerontology courses in curricula	**1.** Inclusion of geriatric and gerontology trainings in curricula **2.** Number of geriatric and gerontology courses in curricula of medical faculties	**1.** Knowledge, behaviour and attitudes achieved by graduate physicians **2.** Evaluation of changed in the approaches of physicians to the elderly patients **3.** Evaluation works of elderly patients satisfaction	**1.** YOK **2.** Ministry of Health	Periodic

Target 2- Ensuring the presence of the qualified medical personnel providing services to the elderly

Strategy	Activities	Output Indicators	Result Indicators	Responsible Institution and Organization	Period
2.1. Including the education of geriatrics and gerontology in the curricula of the relevant departments of the universities that educate the nurses, social workers, dieticians, psychologists, physiotherapists and occupational serving the elderly, and disseminating this throughout the country	**2.1.1.** Determination of the distribution of tasks of interdisciplinary teams **2.1.2.** Dissemination and updating of geriatric and gerontology training programs appropriate to each professional group **2.1.3.** Inclusion of geriatric and gerontology curricula **2.1.4.** Increasing undergraduate geriatric and gerontology trainings **2.1.5.** Increasing the number of professional groups, especially those serving the elderly	**1.** Inclusion of geriatric and gerontology trainings in curricula **2.** Increase in the number of trained personnel on geriatrics and gerontology	**1.** Increase in the number of interdisciplinary team personnel **2.** Increase in the number of the postgraduate students **3.** Evaluation works for the satisfaction of the health care professionals serving the elderly	**1.** Ministry of Health **2.** YOK **3.** Universities **4.** NGO	2 years

Target 3- Promotion of sub-specialization on geriatrics

Strategy	Activities	Output Indicators	Result Indicators	Responsible Institution and Organization	Period
3.1. Disseminating the sub-specialization in geriatrics under the department of internal medicine of the medical faculties throughout all of the universities and training and research hospitals	**3.1.1.** Increasing geriatric disciplines in the universities **3.1.2.** Opening geriatric clinics in training and research hospitals under the Ministry of Health **3.1.3.** Increasing geriatric sub-specialist positions **3.1.4.** Creation and Development of performance applications in geriatric training and implementation activities	**1.** Increase in geriatric disciplines and geriatric clinics **2.** Increase in the number of geriatricians **3.** Reduction in the number of different branches and examination that the elderly undergo	**1.** Increase in the quality of the services provided for the elderly **2.** Ensuring that the elderly can receive the services from a single centre **3.** Reduction in chronic diseases-associated deaths of complications in the elderly patients **4.** Enhance the lifespan expected in the health statistics	**1.** Ministry of Health **2.** Ministry of Development (TUIK) **3.** YOK **4.** Universities **6.** STK	Periodic

Target 4- Organizing geriatric training intended for primary health care physicians

Strategy	Activities	Output Indicators	Result Indicators	Responsible Institution and Organization	Period
4.1. Allowing for geriatric rotation in the trainings of family practice specialization and adding and updating geriatrics module in Remote Health Training System (RHTS)	**4.1.1.** Increasing undergraduate and postgraduate geriatric trainings **4.1.2.** Inclusion of geriatric rotation in the curricula of family practice **4.1.3.** Ensuring these trainings during internal diseases rotation where geriatric clinics are not available **4.1.4.** Preparing training module in the Family Practice RHTS **4.1.5.** Providing in-service trainings about elderly health and arranging standard certified training programs **4.1.6.** Positive performance implementation in training activities	**1.** Geriatrics module in RHTS practices **2.** Changing the curriculum in a way to cover geriatric courses in family practice **3.** Ensuring the preparation of course and certification programs **4.** Number of the primary care physicians who have acquired geriatric knowledge, behaviours and attitudes	**1.** Accurate diagnosis, treatment and follow-up of the elderly in primary health care **2.** Decrease in the number of the elderly patient who have been dispatched by primary health care **3.** Monitoring of RHTS module	**1.** Ministry of Health **2.** SGK **3.** YOK **4.** Universities **5.** NGO	2 years

Target 5- Organizing geriatric training for health care professionals (physicians, geriatricians, geriatric nurse, social worker, dietitian, psychologist, physiotherapist, occupational therapist) serving the elderly					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
5.1. Starting and developing the training programs for the health care professionals (physicians, geriatricians, geriatric nurse, social worker, dietitian, psychologist, physiotherapist, occupational therapist) and caregivers serving the elderly in coordination with the relevant institutions, ensuring the periodicity of the training, training the personnel in effective communication techniques with the elderly and supporting the associated projects	**5.1.1.** Preparation of geriatric and gerontology programs **5.1.2.** Ensuring the periodicity of in-service programs **5.1.3.** Supporting the realization of national and international projects **5.1.4.** Making in-service training of health care professional serving the elderly compulsory on a regular basis **5.1.5.** Establishment or improvement of performance applications against geriatric training activities	**1.** Increase in the number of professionals participating in in-service-trainings **2.** Increase in the number of projects related to the subject	**1.** Gaining geriatric knowledge and attitudes to health care professionals serving the elderly **2.** Sustainable training activities **3.** Evaluation of quality of life related to the elderly **4.** Evaluation of satisfaction of health care professionals serving the elderly	**1.** Ministry of Health **2.** SGK **3.** YOK **4.** Universities **5.** NGO	Periodic

Target 6- Organizing the training of the caregivers serving the elderly, apart from health care professionals (physicians, geriatricians, geriatric nurse, social worker, dietitian, psychologist, physiotherapist, occupational therapist)

Strategy	Activities	Output Indicators	Result Indicators	Responsible Institution and Organization	Period
6.1. Ensuring a periodic standard training with a holistic approach related to psychological, social aspects of the elderly for the families, family relatives, caregivers and other persons apart from health care professionals that provide care services to the elderly and carrying out necessary organizations	**6.1.1.** Dissemination of standard training programs **6.1.2.** Preparation of elderly care guidelines and distribution of this to the units required **6.1.3.** Providing public training seminars **6.1.4.** Providing training about effective communication with the elderly **6.1.5.** Ensuring standard and periodic trainings for technicians serving the elderly	Number of training organized for caregivers serving the elderly	**1.** Gaining geriatric knowledge and attitudes to health care professionals serving the elderly **2.** Decrease in the indicators of neglect, abuse and violence against the elderly **3.** Increase in the quality of elderly care services **4.** Reduction in the problems of caregivers	**1.** Ministry of Family and Social Policies **2.** Ministry of Health **3.** Ministry of Internal Affairs **4.** Universities **5.** NGO	Periodic

Target 7- Ensuring rational use of medicines in the elderly

Strategy	Activities	Output Indicators	Result Indicators	Responsible Institution and Organization	Period
7.1. Ensuring training for all of the health care professionals serving the elderly about rational use of medicines	**7.1.1.** Preparing training programs **7.1.2.** Carrying out course, seminars and training programs **7.1.3.** Increasing the number of rational use of medicine panels in the congresses **7.1.4.** Promoting rational use of medicine symposia and increasing its frequency	**1.** Rational use of medicine by the elderly **2.** Rational use of medicine promoted by physicians **3.** Increase in the number of trainings carried out **4.** Increase in the number of symposia **5.** Increase in the number of personnel trained	**1.** Proficiency about rational drug use, drug interactions and side effects acquired by health care professionals **2.** Reduction of polypharmacy in the elderly **3.** Reduction in the hospital admissions arising from drug-related complications **4.** Reduction of drug costs	**1.** Ministry of Health **2.** SGK **3.** Universities **4.** NGO	Periodic

Target 8- Raising awareness of health aging in the elderly					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
8.1. Performing awareness works about healthy aging, physiological aging, diseases and rational use of medicines intended for the elderly in coordination with the relevant institutions and organizations	**8.1.1.** Organizing health aging and physiological aging trainings intended for the elderly **8.1.2.** Organizing trainings about rational use of medicines and the diseases frequently seen in the elderly	**1.** Increase of the programs intended for the elderly **2.** Number of the elderly trainees	Enhanced consciousness about aging in the elderly	**1.** Ministry of Health **2.** Ministry of Family and Social Policies **3.** Universities **4.** NGO	Periodic

Target 9- Certifying the health care professionals serving the elderly					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
9.1. Developing certified training programs about monitoring and care of the elderly for the health care professionals (physicians, geriatricians, geriatric nurse, social worker, dietitian, psychologist, physiotherapist, occupational therapist) serving the elderly	**9.1.1.** Organization and implementation of standard certified training programs **9.1.2.** Implementation of positive performance in training activities **9.1.3.** Development of projects and studies by the teams	**1.** Number of standard certified training programs **2.** Increase in the quality of service provision of the personnel serving the elderly	**1.** Increase in the quality of elderly care **2.** Scale of quality of life **3.** Increase in the number of the qualified personnel serving the elderly	**1.** Ministry of Health **2.** SGK **3.** Universities **4.** NGO	2 years

Target 10- Disseminating effective teamwork					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
10.1. Disseminating and implementing the concept of interdisciplinary geriatric team (geriatrics physician, nurse, social worker, dietitian, psychologist, physiotherapist etc.)	**10.1.1.** Definition of interdisciplinary team in geriatrics **10.1.2.** Inclusion of the interdisciplinary concept in geriatrics in all of the training programs **10.1.3.** Ensuring efficient communication between team members **10.1.4.** Development of projects and researches by the teams **10.1.5.** Ensuring the necessary legal regulations for that interdisciplinary team members should be full-time employees and should serve the elderly in the same places	**1.** Increase in the quality of service provided for the elderly **2.** Number of projects **3.** Number of the full-time teams operating regularly and in unison	**1.** Increase in the satisfaction of the elderly **2.** Sustainable training activities **3.** Reduction of hospitalization periods **4.** Reduction of recurring hospitalizations **5.** Decrease in mortality and morbidity **6.** Reduction of health costs	**1.** Ministry of Health **2.** SGK **3.** Universities **4.** NGO	Dissemination within 1 year and periodic implementation

1.9. PROVISION OF SUFFICIENT NUTRITION AND ACCESS TO FOOD FOR THE ELDERLY

Current Situation in the World and Turkey

Unhealthy nutrition and obesity growing out of this cause the formation nutrition-related chronic diseases (cardiovascular disease, cancer, diabetes, osteoporosis, etc.). Although these diseases are caused by the interaction of multiple factors, scientific studies has shown that incorrect nutrition habits carrying on since childhood are an important factor for these. For example; the effects of rickets developing in childhood as a result of vitamin D deficiency demonstrate themselves more, increasing the risk of development of some chronic diseases (respiratory failure, etc.) on account of skeletal malformations.

Malnutrition in the Elderly Population in Turkey

In a study conducted by İstanbul University Faculty of Medicine, Department of Internal Medicine, the nutritional status of the elderly patients monitored in the Geriatrics Outpatient Clinic was scanned with the Mini Nutritional Assessment Test, malnutrition rate was found to be 13 percent and the risk of malnutrition rate was found to be 31 percent as an addition. Especially those with malnutrition, the increase in the incidence of depression, faecal incontinence, loss of cognitive function and physical dependency was identified (58).

In two cross-sectional studies conducted with the scanning of the elderly in a large-scale nursing home located within the boundaries of İstanbul in 2009 and 2010, malnutrition rate was found to be 9.8 percent, and the risk of malnutrition rate was found to be 22,8 as an addition. The incidence of other geriatric syndromes has a significant increase in the elderly detected to have malnutrition.

In 2010, in a screening conducted on 349 nursing home residents, malnutrition rate was found to be 13,5 percent, and the risk of malnutrition was found to be 33,5 percent as an addition. Significant relationship was observed between malnutrition and dementia and sarcopenia. In study conducted on hospitalized patients in İstanbul Faculty of Medicine, Geriatrics Clinic of Internal Medicine in 2010, malnutrition rate at the time of hospitalization was found to be 44,5 percent. Hospitalization periods (18.9 ± 19.1 vs. 11.3 ± 11.3 days, $p < 0.0001$) and incidence rate of hospital infection (45 percent vs. 7 percent, $P < 0.001$, OR: 3,298) were found to be significantly increased in the group at risk of malnutrition (59).

The results of current food consumption studies show that the elderly residing in nursing homes and at homes have deficiencies in consumption of protein, vitamin A, B1 and B2, niacin and vitamin C and the minerals like iron, calcium and zinc.

Although the incidence of the folate and vitamin B12 deficiencies in the elderly in the whole population is not known, the deficiency of these two vitamins is known to be a major cause of the formation of cardiovascular diseases.

Malnutrition in the Elderly Population in the World

In a study conducted by Kaiser MJ et al., malnutrition rate was found to be 5,8 percent in the elderly living in society, 13,8 percent in those living in nursing homes and 38,7 percent in hospitalized patients (60).

In the recommendations of ESPEN (European Society for Clinical Nutrition and Metabolism), which was published in 2002, all individuals over 65 years are targeted to be screened. Similar proposal is included in the subsequently issued guidelines (61).

In line with the decision taken by the European Parliament in 2007, obesity and malnutrition have been recognized as the most important public health problem and this issue was included in the official political agenda of the European Union in 2008. 2009 was declared by ESPEN as the year of fighting malnutrition. Based on these data, all the elderly living in the community and hospitalized in geriatric clinics should be screened for nutritional status, and treatment plan should be developed by making detailed assessments in risky individuals (59).

In a study examining the subject of individualized dietary, the quality of life and physical activity gains of the individuals with head and neck cancer who receive radiotherapy treatment was revealed with 3 nutrition branches (individualized diet prepared by a dietitian, standard hospital food and enteral nutrition support, and standard hospital food alone), the most effective results in this study were obtained on the first branch (62). This reveals the importance of personal diet support under dietitian supervision and individualized diet menu selection.

With the establishment of clinical nutrition teams in hospitals, it will be possible to identify the patients who need nutritional support and to determine their malnutrition degree, to plan appropriate treatment, to provide efficient and safe nutrition support, to prevent sarcopenia developed as secondary upon malnutrition in the elderly and obese patients, to closely monitor the patients until discharge, and to maintain home care by planning a polyclinic-based follow-up procedure after discharge.

Physicians (internal medicine, general surgery and neurology specialists), nutritionists, nurses, psychologists, physiotherapists and dentists are to be recommended to be involved within the structure of the team. Monitoring and documentation of clinical nutritional status, evaluation of the relation between hospitalization periods and nutritional status, determination of the relation between the complications occurring during the disease and national status, and revealing the role of efficient nutritional support in wound healing and tissue repair speed retaining are included in study protocols of the team.

In our country, the reimbursement of nutritional support is made to the hospitalized patients and out patients with nutrition problems. Nutritional problems of outpatients are reported and they can be provided with supportive care at home. In the reporting stage of nutritional products, it is important that daily energy requirements of the patient and how much of this requirement can be taken orally should be written in the report. Thus, daily amount of the requirement for the support products can be determined healthier. In this way, unnecessary prescription can be prevented.

Target and Strategies towards Provision of Sufficient Nutrition and Access to Food Product for the Elderly

Target 1- Gaining healthy nutrition habits to all age groups until the old age period

Strategy 1

Promotion of sufficient and balanced diet beginning from childhood by paying attention to meeting individualized nutrition needs during the course of lifetime

Target 2- Prevention of malnutrition in the elderly and implementation of effective treatment for malnutrition

Strategy 1

Determination of malnutrition rates of the elderly living in society and in nursing homes and hospitalized patients through health screening and assessment test, identification of the causes of malnutrition and creation of effective treatment plan

Target 3- Development of Turkey-specific nutrition policies for the individuals over 65 years of age

Strategy 1

Development of the awareness in the elderly about healthy and balanced diet.

Target 4- Early detection of tooth and gum problems in the elderly and strengthening of access to treatment services

Strategy 1

Performing periodic checks of dental health of the individuals over 65 years of age

Target 5- Ensuring sufficient and balanced diet in the elderly

Strategy 1

Ensuring the sufficient and balanced diet which do not cause micro and macro nutrient deficiencies, provides sufficient energy and is appropriate to national nutrition targets and the needs of the elderly staying in the hospital and other care institutions by presenting set of choices in food

Target 6- Establishment of clinical nutrition teams in hospitals and identification of service areas of these teams in Communiqué of Health Application (CHA)

Strategy 1

Identification of the patients who need nutritional support, determination of their malnutrition degree, planning of appropriate treatment, provision of efficient and safe nutrition support, prevention of sarcopenia developed as secondary upon malnutrition in the elderly and obese patients, closely monitoring of patients until discharge and provision of home care by planning a polyclinic-based follow-up procedure

Target 7- Education of health care professionals about health nutrition principles and supports

Strategy 1

Ensuring the inclusion of special nutritional needs of the elderly in the curricula for training all health care professionals

Strategy 2

Ensuring the training of the elderly about healthy nutrition and eating habits within the scope of home care

Target 8- Ensuring the solution to the reimbursement of implementation problems of nutritional products for the patients with nutritional problems

Strategy 1

Minimization of reimbursement losses and elimination of the deficiencies of the existing application

1.9. Provision of Sufficient Nutrition and Access to Food Products for the Elderly

Target 1- Including the education of geriatrics and gerontology in the curricula of medical faculties					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
1.1. Promotion of sufficient and balanced diet beginning from childhood by paying attention to meeting individualized nutrition needs during the course of lifetime	**1.1.1.** Preparation of distance training module of Family Practice **1.1.2.** Holding public education meetings **1.1.3.** Preparation of training programs on TV **1.1.4.** Provision of training programs in visual media **1.1.5.** Arrangement of educational activities in schools	**1.** Increase in the knowledge level on healthy eating in all ages **2.** Increase in the number of the individuals who have received training on nutrition **3.** Decrease in the number of chronic diseases associated with malnutrition **4.** Decrease in the number of obese **5.** Decrease in the number of the elderly with malnutrition	**1.** Increase in the number of the elderly who can carry out activities of daily living independently **2.** Increase in the average life span **3.** Reduction of hospital admissions of the elderly **4.** Decrease in the number of chronic diseases **5.** Reduction of the share of chronic diseases in deaths **6.** Making assessments by using malnutrition screening scales **7.** Anthropometric measurements **8.** Quality of life scales **9.** Number of acute hospital admissions in the elderly **10.** Incidence of geriatric syndromes **11.** Incidence of sarcopenia **12.** Follow-up of cognitive syndromes and incidence of dependency	**1.** Ministry of Health **2.** Ministry of National Education **3.** Ministry of Food, Agriculture and Livestock **4.** Ministry of Family and Social Policies **5.** Ministry of Internal Affairs **6.** Religious Affairs **7.** Universities **8.** Press and Broadcasting Organizations **9.** NGO **10.** Food Industry	Periodic

Target 2- Prevention of malnutrition in the elderly and implementation of effective treatment for malnutrition					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
2.1. Determination of malnutrition rates of the elderly living in society and in nursing homes and hospitalized patients through health screening and assessment test, identification of the causes of malnutrition and creation of effective treatment plan	**2.1.1.** Nutritional screening and treatment of the individuals who are 65 years and older **2.1.2.** Creation of algorithm **2.1.3.** Adopting healthy nutrition and life style in order to struggle with malnutrition in the elderly and obesity **2.1.4.** Establishment of clinical nutrition teams in hospitals, and assessment of the patients by dietitians, where these teams are not available	**1.** Malnutrition rated in the elderly **2.** Determination of causes of malnutrition **3.** Number of the elderly directed to dietitian for malnutrition treatment **4.** Number of the elderly who have been consulted by clinical nutrition teams during malnutrition treatment	**1.** Reduction of the relationship between malnutrition and morbidity and morbidity **2.** Increasing the number of clinical nutrition teams which are successful in treatment of malnutrition **3.** Determination of cost-effectiveness of efficient malnutrition treatment **4.** Activity of daily living of the elderly, daily instrumental living activity and its effects on quality of life	**1.** Ministry of Health **2.** Ministry of Family and Social Policies **3.** Ministry of Internal Affairs **4.** Universities **5.** NGO	1 year

Target 3- Development of Turkey-specific nutrition policies for the individuals over 65 years of age					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
3.1. Development of the awareness in the elderly about healthy and balanced diet	**3.1.1.** Determination of the most common nutrient deficiencies in the elderly **3.1.2.** Preparation of elderly-specific health nutrition guidelines	**1.** Making assessments by using malnutrition screening scales **2.** Number of acute hospital admissions in the elderly **3.** Number of chronic diseases	**1.** Replacement of the absent data (nutrient enrichment activities) in the light of Turkey Nutrition and Health Survey (TNHS) Data **2.** Determination energy and nutrient intake levels **3.** Determination of consumption amounts of fundamental nutrition groups	**1.** Ministry of Health **2.** Ministry of Food, Agriculture and Livestock **3.** Ministry of Science, Industry and Technology **4.** Ministry of Internal Affairs **5.** Universities **6.** Press and Broadcasting Organizations **7.** NGO **8.** Food Industry	1 year

Target 4- Early detection of tooth and gum problems in the elderly and strengthening of access to treatment services					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
4.1. Performing periodic checks of dental health of the individuals over 65 years of age	**4.1.1.** Determination of the current situations by performing periodic checks of dental health of the individuals over 65 years of age	**1.** Incidence of oral and dental health problems of the individual over 65 years of age in the community **2.** Relation between oral and dental health problems and the incidence of malnutrition	Reducing the incidence of malnutrition by developing efficient oral and health policy intended for the elderly	**1.** Ministry of Health **2.** Ministry of Internal Affairs **3.** Universities **4.** Press and Broadcasting Organizations	1 year

Target 5- Ensuring sufficient and balanced diet in the elderly					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
5.1. Ensuring the sufficient and balanced diet which do not cause micro and macro nutrient deficiencies, provides sufficient energy and is appropriate to national nutrition targets and the needs of the elderly staying in the hospital and other care institutions by presenting set of choices in food	**5.1.1.** Ensuring the sufficient number of dietitians employment in hospitals and care institutions **5.1.2.** Ensuring menu variety **5.1.3.** Creation of the next day menus by offering a la carte menus of the following day to the hospitalized patients **5.1.4.** Establishment of clinical nutrition teams, thereby actively screening the elderly **5.1.5.** Dissemination of interdisciplinary works, which can reveal the importance of this subject, across the country **5.1.6.** Introduction of obligation for the private catering companies that will provide food for hospital and institutions to employ dietitian **5.1.7.** Definition of clinical nutrition teams and their services in the CHA	**1.** Number of day and/or residential care institutions that reach sufficient and balanced menu variety for the elderly **2.** Number of the elderly receiving support treatment **3.** Number of hospital nutrition units **4.** Definition nutrition tests in the CHA and their number	**1.** Increase in quality of life **2.** Decrease in morbidity and mortality **3.** Reduction of the incidence of malnutrition in hospitals **4.** Decrease in the number of patients diagnosed with malnutrition	**1.** Ministry of Health **2.** Ministry of Family and Social Policies **3.** Universities **4.** Food Industry	2 years

Target 6- Establishment of clinical nutrition teams in hospitals and identification of service areas of these teams in Communiqué of Health Application (CHA)					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
6.1. Identification of the patients who need nutritional support, determination of their malnutrition degree, planning of appropriate treatment, provision of efficient and safe nutrition support, prevention of sarcopenia developed as secondary upon malnutrition in the elderly and obese patients, monitoring of patients from polyclinic until discharge and provision of home care	**6.1.1.** Establishment of clinical nutrition teams in hospitals **6.1.2.** Definition of clinical nutrition teams and their services in the CHA	**1.** Determination of malnutrition rates of the hospitalized patients **2.** Elimination of risks with the early diagnosis and treatment of the patients with malnutrition risks **3.** Decrease in the number of infection due to malnutrition **4.** Reduction of hospitalization periods as a result of malnutrition **5.** Number of acute hospital admissions of the elderly **6.** Number of chronic diseases **7.** Number of nutrition tests defined in the CHA	**1.** Decrease in the number of the hospitalized elderly patient with malnutrition **2.** Reduction of malnutrition-related morbidity and mortality **3.** Increase in quality of life **4.** Elongated average lifespan **5.** Decrease in the number of acute hospital admissions of the elderly **6.** Decrease in the number of chronic diseases **7.** Increase in activities of daily living **8.** Decrease in the incidence of geriatric syndromes	**1.** Ministry of Health **2.** Universities **3.** NGO	3 years

Target 7- Education of all health care professionals about health nutrition principles and supports					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
7.1. Ensuring the inclusion of special nutritional needs of the elderly in the curricula for training all health care professionals	**7.1.1.** Establishing and supporting professional interdisciplinary teams of home care (physicians, nurses, dietitians and health care professionals) **7.1.2.** Assessment of nutrition status of monitored patients at certain intervals and provision of individualized dietary programs	**1.** Increase in the knowledge level of health care professionals about health nutrition **2.** Incidence of geriatric syndromes **3.** Increase in daily oral food intake amounts	**1.** Decrease in the number of the hospitalized elderly with malnutrition **2.** Reduction of malnutrition-related hospital morbidity and mortality	**1.** Ministry of Health **2.** Ministry of Family and Social Policies **3.** Ministry of Food, Agriculture and Livestock **4.** Universities **5.** NGO	3 years
7.2. Ensuring the training of the elderly about healthy nutrition and eating habits within the scope of home care	**7.2.1.** Ensuring in-service trainings of health care professionals	Decrease in malnutrition rates of the elderly living in society	**1.** Reduction of malnutrition-related morbidity and mortality of the elderly living in society **2.** Increase in physical activities and quality of life of the elderly living in society	**1.** Ministry of Health **2.** Ministry of Family and Social Policies **3.** Ministry of Internal Affair **4.** Universities **5.** NGO	3 years

Target 8- Ensuring the solution to the reimbursement of implementation problems of nutritional products for the patients with nutritional problems					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
8.1. Minimization of reimbursement losses and elimination of the deficiencies of the existing application	**8.1.1.** Organization of daily nutrition product amount which is determined according to daily energy requirement	Ensuring healthier report system	Minimization of losses in reimbursements	**1.** Ministry of Health **2.** SGK	3 years

1.10. PROVISION OF LONG-TERM HEALTH CARE AND FULL ACCESS TO HEALTH CARE SERVICES IN GERIATRICS

Current Situation in the World and Turkey

It is a requirement of understanding of a social state to ensure that individuals can live in healthy, good quality and longest possible period without being dependent on others. Accompanied by degrees of illness and disability, the elderly individuals are facing many difficulties at various rates in daily living and need support services. In this context, elderly care services aimed at supporting the elderly individuals, who cannot resolve individual needs without someone else's help, emerge as a major concern.

When care needs are assessed, the needy groups with first priority are the adults with severe disabilities in need of care and the elderly people who have become disabled who are very difficult to be reclaimed to social life. The quality of care services for elderly and severely disabled people and improving the quality of life of these individuals are of great importance. However, severely disabled adults and the elderly often remain in the background in care services. These individuals, particularly the increasing need for assistance and care with aging, are one of the first issues to be addressed on the basis of the principle of the social state.

Care services are defined as professional support services that are provided for the people in need of care at home or in institutions. Target priority in care service is to provide care service for the individuals in need of care near their families without separating them from social environment and is that their families provide moral and financial supports in this regard.

Care services are generally considered as institutional care and home care. Institutional care is a type of care in which the personal, social, psychological and health needs of the individuals, who are in need of help despite the support provided at home and cannot be cared beside their families, are met, there are activities to help them spare their leisure times, and the social relations and activities are increased.

However, demand of the elderly in our country who need long-term care services still continue to receive services from the agency. In our country, long-term care services are carried out by the Ministry of Family and Social Policies, municipalities, public institutions, NGO’s and private sector organizations dependent care. In this context, regarding the areas where the Ministry of Health perform the activities, strategies, targets, activities, output, result indicators, responsible institutions and periods have been determined. The importance of performing the activities carried out under the Ministry of Development and the Ministry of Family and Social Policies that should be carried out in coordination has been highlighted.

Target and Strategies towards the Provision of Long-Term Health Care in Geriatrics and Full Access to Care Services

Target 1- Geriatric, gerontological multidisciplinary and interdisciplinary approach

Strategy 1

Ensuring referral and transfer flow

Strategy 2

Ensuring a sufficient number of full-time employment for all professional personnel that will be required in the institutions serving the individual older than 65 years

Strategy 3

Designation of collaboration with health care institutions and organizations with the protocols (Universities, Ministry of Family and Social Policies, NGO's and etc.)

Strategy 4

Development of teamwork concept in long-term care service

Strategy 5

Raising awareness about inter-professional respect, communication, trust, tolerance, the proper use of professional knowledge and skills and etc. which are the necessity of the concept of teamwork

Strategy 6

Ensuring interdisciplinary and multidisciplinary approach through communication with all health units, standardization and supervision accreditation

Strategy 7

Creating awareness on positive contribution of nutrition and physical activity to health

Strategy 8

Making job definitions of elderly care personnel

Target 2- Holistic approach towards preventive, protective, diagnostic and therapeutic follow-up and rehabilitation

Strategy 1

Ensuring continuity of services that include; meeting multivariate requirements of the elderly, using resource allocation efficiently, protecting from diseases, controlling preventive factors, developing existing health services, fundamental health care, emergency treatment, rehabilitation, psycho-social support, long-term care and palliative treatment services

Target 3- Standardization in education and supervision

Strategy 1

Training for professionals

Strategy 2

Training for care personnel

Strategy 3

Training for elderly relatives

Strategy 4

Training for elderly people

1.10. Provision of Long-Term Health Care in Geriatrics and Full Access to Care Services

Target 1- Geriatric, gerontological multidisciplinary (multidisciplinary) and interdisciplinary (multidisciplinary) approach

Strategy	Activities	Output Indicators	Result Indicators	Responsible Institution and Organization	Period
1.1. Ensuring referral and transfer flow **1.2. Ensuring a sufficient number of full-time employment for all professional personnel that will be required in the institutions serving the individual older than 65 years** **1.3. Designation of collaboration with health care institutions and organizations with the protocols (Universities, Ministry of Family and Social Policies, NGO's and etc.)** **1.4. Development of teamwork concept in long-term care service** **1.5. Raising awareness about inter-professional respect, communication, trust, tolerance, the proper use of professional knowledge and skills and etc. which are the necessity of the concept of teamwork** **1.6. Ensuring interdisciplinary and multidisciplinary approach through communication with all health units, standardization and supervision accreditation** **1.7. Creating awareness on positive contribution of nutrition and physical activity to health** **1.8. Making job definitions of elderly care personnel**	**1.1.1.** Linking database of Ministry of Health with automation system **1.1.2.** Linking departments of geriatrics and internal medicine with long-term health care units of other disciplines in provinces **1.1.3.** Ensuring interdisciplinary coordination, and coordination with multidisciplinary team where necessary **1.1.4.** Where accessibility to health care in the institutions in which the patient is staying is not possible, improvement, facilitation and supervision of chain of referrals to secondary and tertiary health care chains	**1.** Effective, reliable and fast access to service **2.** Increase in the number of qualified personnel **3.** Harmonization go institutions and organizations **4.** Ensuring a healthy and independent elderly population in activities of daily living **5.** Clinical quality works at regular intervals **6.** Employment of qualified personnel who are aware of their duties and responsibilities **7.** Certifying the existing employees with in-service training programs	**1.** Enhanced quality of service **2.** Enhanced personnel motivation **3.** Improvement in the measurable criteria in assessment forms **4.** Ensuring accreditation **5.** Legitimizing the job definitions of health nursing	**1.** Ministry of Health **2.** Ministry of Family and Social Policies **3.** Universities **4.** NGO	Periodic
	1.1.5. Making clear job definitions of professionals in the team and highlighting their duty and responsibilities with in-service trainings				2 years
	1.1.6. Establishment of a common vision and training planning between the institutions for cooperation works **1.1.7.** Increasing the number of geriatric departments in provinces **1.1.8** Creation of training modules				3 years

Target 2- Holistic approach towards preventive, protective, diagnostic and therapeutic follow-up and rehabilitation					
Strategy	**Activities**	**Output Indicators**	**Result Indicators**	**Responsible Institution and Organization**	**Period**
2.1. Ensuring continuity of services that include; meeting multivariate requirements of the elderly, using resource allocation efficiently, protecting from diseases, controlling preventive factors, developing existing health services, fundamental health care, emergency treatment, rehabilitation, psycho-social support, long-term care and palliative treatment services	**2.1.1.** Determination and screening of geriatric syndromes (dementia, etc.), the risk and protective factors (falls, polypharmacy, etc.), creation of awareness in the society about healthy and successful aging **2.1.2.** Performing of regular diet, exercise, social, cognitive activities and group works **2.1.3.** Full-time employment of corporate physician, nurse, social worker, psychologist, physiotherapist, dietician and assistant staff to the existing and future positions; development of knowledge, skill and awareness levels of within the framework of modern approaches **2.1.4.** Widespread use of forms, such as Activities of Daily Living (ADL) scales, Instrumental ADL, Mini Nutritional Assessment (MNA) form, Mobility-Stability Screening Form, Incontinence Evaluation Form, Mini Mental Test (MMT), Geriatric Depression Scale (GDS), Pressure Sore Risk and Rating Scale, Pain Evaluation Sheet, Physical and Functional Capacity Evaluation Form of Geriatric Standard Assessment Instruments	Number of the elderly undergoing comprehensible assessment	**1.** Increase in lifespan and quality of life in old age **2.** Reduction of geriatric syndromes, rehabilitation need, morbidity and mortality	**1.** Ministry of Family and Social Policies **2.** Ministry of Health **3.** SGK **4.** Universities	Periodic

Target 3- Standardization in education and supervision

Strategy	Activities	Output Indicators	Result Indicators	Responsible Institution and Organization	Period
3.1 . Training for professionals **3.2 Training for care personnel** **3.3. Training for elderly relatives** **3.4. Training for elderly people**	**3.1.1. Provision of trainings for professionals** -In-service training -Certificate training on long-term elderly and elderly patient **3.2.1. Provision of trainings for care personnel** -In-service training -Certificate training on long-term elderly and elderly patient **3.3.1. Provision of training for elderly relatives** -Bio-psychological characteristics and problems of old age -Communication with elderly -Training of elderly diseases - Awareness training related to bio-psychological characteristics and problems of old age of elderly relative that provide care services -Training for elderly relatives caring for a patient with dementia -Rehabilitation of elderly relatives caring for a patient with dementia **3.4.1. Training for elderly people** - Training for creating awareness of old age in the elderly and improving the awareness -Training for elderly on elderly diseases -Training for elderly on their own rights and patient rights -Training for elderly on health and active aging process, and ensuring that NGO's take responsibility within the framework of information and standardization for all training programs in which training for elderly on health and active aging process will be provided	**1.** Increase in the educational level of staff serving in health care providing institutions **2.** Increase in the number of certified staff **3.** Decrease in burnout of the staff who have been working in long-term health care providing institutions **4.** Decrease in burnout of elderly relatives **5.** Increase in social participation of elderly **6.** Increase in contribution of elderly to their own disease and treatment process **7.** Establishment of standardization of the training to be provided by NGO's **8.** Quality indicators **9.** Satisfaction surveys of those (elderly and elderly relatives) who receive service from long-term care providing institutions **10.** Pre- and post-assessment surveys questions of personnel training **11.** Satisfaction surveys of the personnel serving in long-term care providing institutions	**1.** Increase in quality of care **2.** Increase in the satisfaction level of care areas **3.** More willingly and efficiently work of the personnel who work in long-term health care providing institutions **4.** Healthier communication with elderly **5.** Increase in public awareness on elderly process **6.** Reduction of complications related to disease and problems related to treatment of elderly **7.** Ensuring the unity in all types of training to be provided 8.Advancement in personnel scales towards palliative care	**1.** Ministry of Family and Social Policies **2.** Ministry of Health **3.** Universities **4.** NGO	Periodic

2. MONITORING AND EVALUATION

Objective

Monitoring and evaluation of the process and outputs of Turkey Healthy Aging Action Plan and Implementation Program 2015-2020 and procurement of evidence-based scientific data for reporting this

Target

Establishment of a national data system to monitor, evaluate and report Turkey Healthy Aging Action Plan and Implementation Program 2015-2020

Strategies

1. Evaluation of Turkey Healthy Aging Action Plan and Implementation Program 2015-2020 shall be carried out in 2021 and an evaluation report shall be issued

2. Annual progress report of Turkey Healthy Aging Action Plan and Implementation Program 2015-2020 shall be issued

3. Determination the current situations of the persons benefitting from the services and the outputs related to the service provided by taking into consideration the priority target group (persons in need of special care due to physical, mental, social or economic conditions) in data analysis of elderly health care services to be provided within the scope of Turkey Healthy Aging Action Plan and Implementation Program 2015-2020

4. Establishment of a national data system and formation of a data flow system model through reporting in our Institution Presidency in order to monitor, evaluate and report the process and outputs of Turkey Healthy Aging Action Plan and Implementation Program 2015-2020

TARGETS		SHORT TERM (1 YEAR)	MEDIUM TERM (2 YEARS)	LONG TERM (4 YEARS)
1. 1. Improvement of Lifelong Health and Healthy Aging	**Improvement of healthy lifestyle in the elderly and the society**		✓	✓
1.2. Improvement of Exercise, Physical Activity and Rehabilitation Services for Elderly	**Creation of knowledge level and social awareness in increasing physical activity and preventing sedentary lifestyle for healthy aging**			✓

TARGETS		SHORT TERM (1 YEAR)	MEDIUM TERM (2 YEARS)	LONG TERM (4 YEARS)
1.3. Improvement of Home Care Services intended for the elderly	1. Development of State Home Care Model	✓		
	2. Improvement of Home Care Services	✓		
	3. Dissemination of Home Care Service	✓		✓
	4. Improvement of the legislation related to home care			✓
	5. Improvement of Home Care Reimbursement (Funding)			✓
	6. Meeting Educational Needs of Home Care Personnel (health and social) and Developing Employment Policies			✓

TARGETS		SHORT TERM (1 YEAR)	MEDIUM TERM (2 YEARS)	LONG TERM (4 YEARS)
1.4. Improvement of Health Care for Elderly and Ensuring Full Access to Health Care Service for the elderly individuals	1. Improvement of Health Care for Elderly	✓	✓	✓
	2. Ensuring Full Access to Health Care Service	✓		
	3. Improvement of Welfare	✓		
1.5. Implementation of Plans and Activities on the Subject of Neuropsychiatric Disorders, Dementia, Geriatric Psychiatry, Disability, Abuse of Elderly and Violence in Old Age	1. Ensuring provision of the necessary cooperation of all of the relevant institutions and preparing the conditions required for the elderly to receive the most effective, accurate and competent service in the diagnosis and treatment of neuropsychiatric disorders		✓	✓
	2. Taking necessary measures and performing rehabilitation to prevent, diagnose and eliminate disability resulting from neuropsychiatric disorders in the elderly			✓
	3. Taking necessary measures to prevent and identify abuse of the elderly intended for community, families and institutions		✓	

TARGETS		SHORT TERM (1 YEAR)	MEDIUM TERM (2 YEARS)	LONG TERM (4 YEARS)
1.6. Ensuring Organization of Acute Care and Emergency Services in Geriatrics	1. Creating awareness in community and all health care professionals about acute care and emergency services in geriatrics	✓		
	2. Ensuring to increase the quality of emergency health services provided for the elderly and to conduct these within the framework of accessibility and efficiency principles	✓		
	3. Provision of trainings related to the differences in emergence, diagnosis and treatment of the acute complications of chronic diseases in the elderly, and establishment of standardization towards approaches to the geriatric patients	✓		
	4. Ensuring that the geriatric patients admitted to emergency service can access to health registration	✓		
	5. Preventing unnecessary drug use in geriatric patients and ensuring effective drug use	✓		

TARGETS		SHORT TERM (1 YEAR)	MEDIUM TERM (2 YEARS)	LONG TERM (4 YEARS)
1.7. Ensuring the Proper and Effective Functioning of Diagnosis, Treatment, Monitoring Services in Old Age	1. Promotion of national geriatric diagnosis and treatment guidelines	✓		
	2. Ensuring the policies for rational use of medicines in the elderly			✓
	3. Determining the problems related to the proper diagnosis of elderly diseases	✓		
	4. Ensuring the researches for diagnosis and treatment of the diseases affecting elderly			✓
	5. Ensuring solutions for reimbursement problems in diagnosis, treatment and follow-up	✓		
	6. Ensuring the development of diagnosis and treatment with postgraduate trainings			✓
	7. Ensuring geriatric assessment in a comprehensive way by sparing time			✓

TARGETS		SHORT TERM (1 YEAR)	MEDIUM TERM (2 YEARS)	LONG TERM (4 YEARS)
1.8. Arrangement of Training of Health Care Professionals and Health Care Providers	1. Including the education of geriatrics and gerontology in the curricula of medical faculties			✓
	2. Ensuring the presence of the qualified medical personnel providing services to the elderly		✓	
	3. Promotion of sub-specialization in geriatrics		✓	
	4. Organizing geriatric training intended for primary health care physicians		✓	
	5. Organizing geriatric training for health care professionals (physicians, geriatricians, geriatric nurse, social worker, dietitian, psychologist, physiotherapist, occupational therapist) serving the elderly		✓	
	6. Organizing the training of the caregivers serving the elderly, apart from health care professionals (physicians, geriatricians, geriatric nurse, social worker, dietitian, psychologist, physiotherapist, occupational therapist)			✓
	7. Ensuring the rational use of medicine in the elderly		✓	
	8. Raising awareness of health aging in the elderly			✓
	9. Certifying the health care professionals serving the elderly		✓	
	10. Disseminating effective teamwork	✓		

TARGETS		SHORT TERM (1 YEAR)	MEDIUM TERM (2 YEARS)	LONG TERM (4 YEARS)
1.9. Provision of Sufficient Nutrition and Access to Food Product for the Elderly	1. Gaining healthy nutrition habits to all age groups until the old age period			✓
	2. Prevention of malnutrition in the elderly and implementation of effective treatment for malnutrition	✓		
	3. Development of Turkey-specific nutrition policies for the individuals over 65 years of age	✓		
	4. Ensuring sufficient and balanced diet in the elderly		✓	
	5. Establishment of clinical nutrition teams in hospitals and identification of service areas of these teams in Communiqué of Health Application (CHA)			✓
	6. Education of all health care professionals about health nutrition principles and supports			✓

TARGETS		SHORT TERM (1 YEAR)	MEDIUM TERM (2 YEARS)	LONG TERM (4 YEARS)
1.10. Provision of Long-Term Health Care in Geriatrics and Full Access to Care Services	1. Geriatric, gerontological multidisciplinary and interdisciplinary approach	✓		
	2. Holistic approach towards preventive, protective, diagnostic and therapeutic follow-up and rehabilitation		✓	
	3. Standardization in education and supervision			✓

3. IMPLEMENTATION MODEL OF PROGRAM

Organization

Health Ministry Undersecretary is responsible for performing Turkey Healthy Aging Action Plan & Implementation Program on behalf of Minister of Health. Executive Board is responsible for performing this plan to Ministry of Health.

General Assembly

General Assembly, comprised of the representatives of all participants, meets twice a year. Study groups evaluate action plans, discuss study reports and activities submitted by Executive Board and express opinions on these. Meeting date, place and agenda of General Assembly are determined by Executive Board and organized by Secretariat.

Executive Board

Executive Board is responsible for management of the program and determination of general strategies. It examines the proposals prepared by study groups before they are discussed in General Assembly and submits these to General Assembly. Executive Board meets twice a year. Meeting date, place and agenda are determined by Executive Board and organized by Secretariat. Executive Board elects its chairman and vice chairman in itself. Duty terms of chairman and vice chairman are a period of two years and this can be performed for a maximum of two terms. Executive Board is comprised of chairmen and secretaries of study groups, Ministry of Health Turkish Public Health Institution, Vice Chairman of Non-communicable Diseases, Programs and Cancer, Director of Chronic Diseases, Elderly Health and Disabled People Department and one representative each determined by the other relevant units.

Study Groups

These are the groups which are established according the program targets and are comprised of General Assembly members in accordance with their missions. Every Study Group prepares proposals in order for the relevant studies related to their areas specified in the actions plans to be carried out, evaluated and improved, submits these to Executive Board, and carries out the approved activities. It meets at least twice a year. Meeting date, place and agenda are determined by Executive Board and organized by Secretariat.

It prepares annual reports, which include the results of their studies, to submit to General Assembly. Chairmen and secretaries of Study Groups are elected by the group for a period of two years.

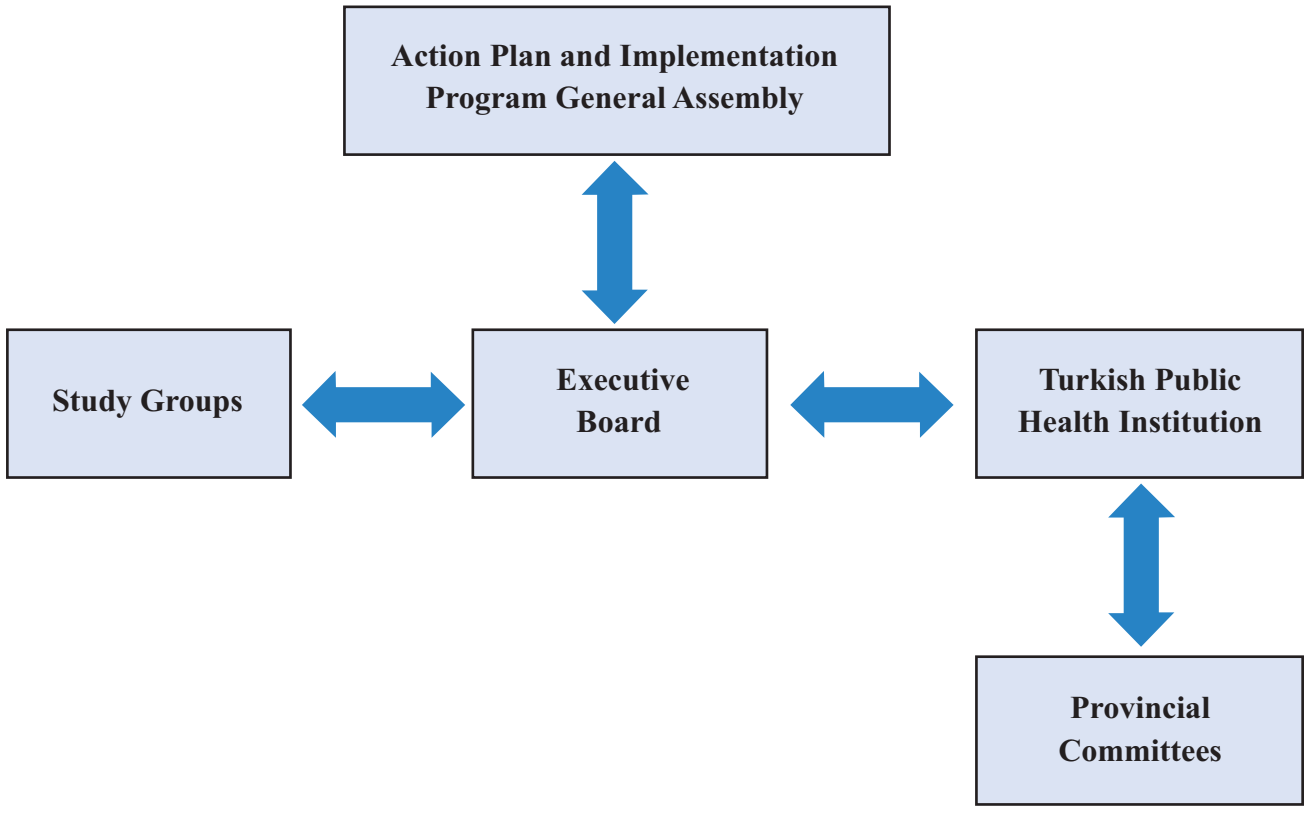
Public Health Directorate

Chronic disease units of each province and province program responsible to be determined shall be responsible for the execution of action plan and implementation program activities in provinces and its coordination within the province. Province program responsible or representatives are the natural member of General Assembly.

Secretariat

Secretarial service is carried out by Ministry of Health, Turkish Public Health Institution, Head of Department of Chronic Diseases, Elderly Health and Disabled People.

ORGANIZATION OF TURKEY HEALTHY AGING ACTION PLAN AND IMPLEMENTATION PROGRAM



4. REFERENCES

1. TUIK.(2013). Retrieved:03 February 2014, http://tuik.gov.tr/PreHaberBultenleri.do?id=13466

2. WHO. Retrieved:03 February 2014, http://www.who.int/healthinfo/survey/ageingdefnolder/en/

3. United Nations (UN). World Population Prospects the 2010 Revision. Retrieved: 22 January 2014. http://www.un.org/en/development/desa/population/publications/pdf/trends/WPP2010/WPP2010_Volume-II_Demographic-Profiles.pdf

4. WHO. World Health Statistics 2013. Geneva, World Health Organization.

5. WHO. Preventing Chronic Diseases: a vital investment: WHO global report. 2005. Geneva, World Health Organization.

6. International Diabetes Federation. Diabetes Atlas, 6th Edition, Brussels, 2013

7. Ministry of Health (Former) Refik Saydam Hygiene Centre Directorate. (December, 2006). Türkiye Hastalık Yükü Çalışması 2004.[A Study of Burden of Disease on Turkey] (Publication No: 701). Retrieved: 13 February 2014, http://ekutuphane.tusak.gov.tr/kitaplar/turkiye_hastalik_yuku_calismasi.pdf

8. State Institute of Statistics. (2004). Turkey Disability Survey 2002. (Publication No:2913). Retrieved: 20 February 2014, Retrieved from: http://kutuphane.tuik.gov.tr/pdf/0014899.pdf

9. TUIK.(2013). Retrieved:04 February 2014, http://www.tuik.gov.tr/PreHaberBultenleri.do?id=15844

10. WHO. Active Ageing Good Health Adds Life to Years: Policies and Priority Interventions for Healthy Ageing. WHO Regional Office for Europe. 2012. Copenhagen, World Health Organization

11. Gauchard GC, Jeandel C, Perrin PP. Physical and Sporting Activities Improve Vestibular Afferent Usage and Balance in Elderly Human Subjects. Gerontology, 2001; 47: 263-270.

12. Şahin G. Assessment Methods of Physical Activity Levels in the Elderly. Turkish Journal of Geriatrics 2010;14(2):172–8.

13. WHO. Global health risks: mortality and burden of disease attributable to selected major risks. 2009. Geneva, World Health Organization.

14. Wen CP, Wu X (2012). Stressing harms of physical inactivity to promote exercise. Lancet [Series on physical activity], 380(9838):192–193.

15. M.K. Karisson. H. Magnusson. T. Von Schewelov. B.E. Rosengren. " Prevention of falls in the elderly- a review", International Osteoporosis Foundation and National Osteoporosis Foundation 2012, Osteoporosis Int. (2013) 24:747-762

16. Lee I-M et al. (2012). Effect of physical inactivity on major non-communicable diseases worldwide: an analysis of burden of disease and life expectancy. Lancet [Series on physical activity], 380(9838):219–229.

17. Barry HC, Eathorne SW: Exercise and aging issues for the practitioner. Med Clin North Am 1994;78(2):357-76.

18. The European Observatory on Health Systems and Policies .2012. Home Care Across Europe: Current Structure and Future Challenges: Observatory Studies Series 27. Accessed: 13 February 2014, http://www.euro.who.int/_data/assets/pdf_file/0008/181799/e96757.pdf

19. TUIK, Elderly with Statistics 2012: Publication No: 3909, 2013. Ankara, Turkish Statistical Institute

20. WONCA Europe 2002: Family Practice/General Practitioner European Definition. 2002. WONCA

21. Ministry of Health (Former) General Directorate of Primary Health Care: Yaşlı Sağlığı Modülleri: Eğitimciler İçin Eğitim Rehberi [Elderly Health Modules, Guideline for Educators],2011, Ankara

22. WHO. Dementia a public Health Priority. 2012. Geneva, World Health Organization

23. World Report on Violence and Health. Abuse of the Elderly. Chapter 5. 2002. Geneva, World Health Organization,

24. Bilir N, Paksoy N. Değişen Dünyada ve Türkiye'de Yaşlılık Kavramı. Temel Geriatri[Aging Concept in Changing World and Turkey. Basic Geriatrics] (Ed: Kutsal YG, Ed Yrd: Aslan D) Güneş Kitabevleri, Ankara, 2007.

25. The World Health Report. 21. Yüzyılda Yaşam: Herkes İçin Bir Vizyon [Life in 21st Century: A Vision for All]. (Trans. Ed: Metin B, Akın A, Güngör İ). Ministry of Health, General Directorate of Health Projects, Ankara, 1998.

26. Koştu N. Yaşlı İstismarı ve İhmalinin Önlenmesinde Halk Sağlığı Hemşiresinin Rolü [Role of Public Health Nurses in Elder Abuse and Neglect]. Özveri Dergisi. 2005;2 (2):527-534.

27. Alkan N, Fincancı ŞK. Aile İçi Şiddette Adli Tıbbın İşlevi [Function of Forensic Medicine in Domestic Violence]. I National Family Services Symposium.. Turkish Prime Ministry Family Research Institute Science Series: 117, Ankara. 2001:149 153.

28. Wolf, R.S. (2000). The Nature and Scope of Elder Abuse. Generations, 24:2, 7-13.

29. Tatara, T. and Kuzmeskus, L. (1997). Summaries of the statistical data on elder abuse in domestic settings: An exploratory study of staff statistics for FY 95 and 96. Washington, DC: NCEA.

30. Artan T. Aile içi Fiziksel Yaşlı Istismarı [Physical Elder Abuse within Family]. Istanbul University Institute of Social Sciences Department of Forensic Medicine, Unpublished Master Thesis1996.

31. Druss BG, Marcus SC, Rosenheck RA et al.. (2000) Understanding disability in mental and general health conditions. Am J Psychiatry, 157:1485-1491.

32. WHO. (2011) World Report on Disability, Malta, World Health Organization

33. Kaufman DW, Kelly JP, Rosenberg L, et al. Recent patterns of medication use in the ambulatory adult population of the United States: the Slone survey. JAMA. 2002; 287: 337–344.

34. Prescriptions dispensed in community statistics for 1989–1999: England. Statistical Bulletin. http://s3.amazonaws.com/zanran_storage/www.dh.gov.uk/ContentPages/73959910.pdf

35. Lesage J. Polypharmacy in the geriatric patient. Nurs Clin North Am 1991; 26: 273–290.

36. Wyles H, Rehman HU. Inappropriate polypharmacy in the elderly. Eur J Intern Med. 2005; 16: 311-313.

37. Cankurtaran M, Yavuz BB, Halil M, et al. Polypharmacy in elderly: Does evidence based medicine brings more drug useage? 3rd European Geriatrics congress. The journal of Nutrition, Health, Aging. 2004; 8: 280

38. Beers MH, Ouslander JG, Fingold SF, et al. Inappropriate medication prescribing in skilled-nursing facilities. Ann Intern Med. 1992; 117: 684-689.

39. Wilcox SM, Himmelstein DU, Woolhandler S. Inappropriate drug prescribing for the community-dwelling elderly. JAMA. 1994; 272: 292-296.

40. Zagaria MAE. Pharmaceutical care of the older patient. US Pharm. 2000; 25: 94-95.

41. Arıogul S. Geriatri ve Gerontoloji [Geriatrics and Gerontology.]. Halil M; Yaşlı Hastalarda Polifarmasi [Polypharmacy in the Elderly Patient.]. 1. Print, Ankara MN Medikal & Nobel. 2006: 393-400.

42. Monette J, Gurwitz JH, Avorn J. Epidemiology of adverse drug events in the nursing home setting. Drugs Aging. 1995; 7: 203- 211.

43. Beijer HJ, de Blaey CJ. Hospitalisations caused by adverse drug reactions (ADR): a meta-analysis of observational studies. Pharm World Sci 2002; 24: 46-54.

44. Von Renteln-Kruse W, Thiesemann N, Thiesemann R, et al. Does frailty predispose to adverse drug reactions in older patients? Age Ageing. 2000; 29: 461-462.

45. Mannesse CK, Derks FHM, Ridder MAJ. Contribution of adverse drug reactions to hospital admission of older patients. Age Ageing. 2000; 29: 35-39.

46. Grymonpre RE, Mitenko PA, Sitar DS, et al. Drug-associated hospital admissions in older medical patients. J Am Geriatr Soc.1988; 36: 1092-1098.

47. Winterstein A, Sauer B, Hepler C, et al. Preventable drug-related hospital admissions. Ann Pharmacother. 2002;36:1238-1248

48. Hajjar ER, Hanlon JT, Sloane RJ, et al. Unnecessary drug use in frail older people at hospital discharge. J Am Geriatr Soc. 2005; 53: 1518–1523.

49. Leipzig RM, Cumming RG, Tinetti ME. Drugs and falls in older people: a systematic review and meta-analysis: I. Psychotropic drugs. J Am Geriatr Soc. 1999;47: 30-39.

50. Leipzig RM, Cumming RG, Tinetti ME. Drugs and falls in older people: a systematic review and meta-analysis: II. Cardiac and analgesic drugs. J Am Geriatr Soc. 1999; 47: 40-50.

51. WHO. (1998). Retrieved: 04 March 2014, http://www.who.int/whr/1998/en/whr98_en.pdf?ua=1

52. Bernabei R, Carhonin PU: Medical Education. Lancet 1995; 345:1440.

53. Keller I, Makipaa A, Kalenscher T, Kalache A, Geneva. Global Survey on Geriatrics in the Medical Curriculum. World Health Organization, Access Address: http://www.who.int/ageing/projects/en/alc_global_survey_tegeme.pdf. Access Date: 2002.

54. Warren DL, Painter A, Rudisill J. Effects of geriatric education on the attitudes of medical students. J Am Geriatr Soc. 1983;31:435-8.

55. Varkey P, Chutka DS, Lesnick TG. The Aging Game: improving medical students' attitudes toward caring for the elderly. J Am Med Dir Assoc. 2006;7:224-9.

56. Cankurtaran M. Turkiyede geriatri. Geriatri ve Gerontoloji.[Geriatrics in Turkey. Geriatrics and Gerontology] (ed): Servet Arıoğlu MN Medikal ve Nobel Tıp Kitap Sarayı. 2006,69-73.

57. Lye, M.; Vega Vega, J. L.; Macias Nunez, J. F.; Millard, P.; Vellas, B.; Moulias, R.; Passeri, M.; Steen, B.; Reis, R.; Fisher, R.; Kaplan, R.; Marin Larrain, P. P.; Galinsky, D.; Diaz Diaz, A. V.; Vara, G. F.; Ribera Casado, J. M., and Llera, F. G. Declaration of Yuste. European Working Party. Age Ageing. 1999 Mar; 28(2):236.

58. Saka B, Kaya O, Öztürk GB, Erten N, Karan MA. Malnutrition in the elderly and its relationship with other geriatric syndromes. Clin Nutr 201; 29:745-748.

59. Saka, B. "Yaşlı Hastalarda Malnütrisyon"[Malnutrition in Elderly Patients], T. Beğer, D.S. Erdinçler, M.R. Altıparmak (Ed.). I.U. Cerrahpaşa Faculty of Medicine, Periodic Medical Education Activity Symposium Series No 75: December 2011, İstanbul, s. 147-163.

60. Kaiser MJ, Bauer JM, Ramsch C, Uter W, Guigoz Y, Cederholm T, et al.; Mini-Nutritional Assessment International Group. Frequency of malnutrition in older adults: a multinational perspective using the mini nutritional assessment. J Am Geriatr Soc 2010; 58: 1734-8.

61. Volkert D et al. ESPEN Guidelines on Enteral Nutrition: Geriatrics. Clin Nutr 2006; 25: 330–360.

62. Ravasco P. et al. Cancer Wasting and Quality of Life React to Early Individualized Nutritional Counselling. Clin Nutr, 2007; 26: 7-15.

5. APPENDIXES

APPENDIX 1. CONTRIBUTING PUBLIC INSTITUTIONS AND ORGANIZATIONS

(In Alphabetical Order)

Ankara Dr. Abdurrahman Yurtaslan Oncology Training and Research Hospital

Ankara Metropolitan Municipality

Ankara Provincial Health Directorate

Ankara Training and Research Hospital

Çankaya Municipality

Ministry of Development, Turkish Statistical Institute

Ministry of Development, General Directorate of Social Sectors and Coordination

Ministry of Family and Social Policies, General Directorate of Disabled People and Elderly Services

Ministry of Finance

Ministry of Health

- General Directorate of Emergency Medical Services
- General Directorate of Health Research
- General Directorate of Health Information Systems
- General Directorate of Health Promotion
- Directorate General of Health Services
- Pharmaceuticals and Medical Devices Agency of Turkey
- Turkish Public Health Institution
- Public Hospitals Authority of Turkey

Ministry of Labour and Social Security, Department Social Security Institution

Ministry of National Education

APPENDIX 2. CONTRIBUTING UNIVERSITIES

Ankara University

Başkent University

Bilgi University

Gülhane Military Medical Academy (GATA)

Hacettepe University

İstanbul University

Marmara University

Mustafa Kemal University

Sütçü İmam University

APPENDIX 3. CONTRIBUTING NON-GOVERNMENTAL ORGANIZATIONS

(In Alphabetical Order)

Academic Geriatrics Society Association of Emergency Physicians

Association of Geriatric Physiotherapists

Association of Public Health Specialist (HASUDER)

Association of Public Health Specialist

Elderly Platform

Family Physicians Association of Turkey Federation of Family Physicians Associations

Home Care Association

Infectious Diseases and Clinical Microbiology Specialist Association of Turkey (EKMUD)

National Association of Social and Applied Research for Gerontology

Psychiatric Association of Turkey

Turkish Alzheimer Association

Turkish Association of Internal Medicine Specialists

Turkish Geriatrics Society

Turkish Medical Association

Turkish Neurological Society

Turkish Nurses Association

Turkish Psychologists Association

APPENDIX 4. CONTRIBUTING PERSONS

(In Alphabetical Order)

Phys. Mehmet	**AKÇA**	Federation of Family Physicians Associations
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Prof. Dr. Nuray	**KIRDI**	Geriatric Physiotherapy Association

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