



Co-funded by the
Erasmus+ Programme
of the European Union

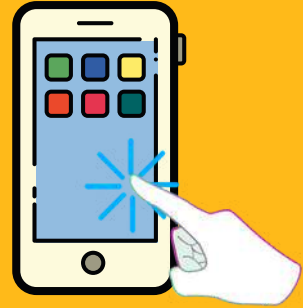


2021-2-TRO1-KA220-YOU-000049391

S U A R E



Software
Utility for
Age
Responsive
Effects



U
A
R
E
S





Co-funded by the
Erasmus+ Programme
of the European Union



SOFTWARE UTILITY FOR AGE RESPONSIVE EFFECTS

"The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein"





INTRODUCTION

INTRODUCTION

The project entitled "Software Utility for Age Responsive Effects" (SUARE) is an Erasmus+ KA2 Strategic Partnership project under the coordination of Ankara Intercultural Research Association (Turkey) and is carried out in collaboration with Association Culturelle Des Jeunes Turcs De Bar Le Duc (France.), Compass - Beratung, Begleitung und Training Gemeinnützige GmbH (Austria), Inercia Digital SL (Spain), Galia Media (Turkey), Batman Provincial Directorate of Health (Turkey) and Psychology Society (Turkey). The project is committed to the creation of a mobile software (SUARE mobile application) on healthy ageing and elderly care, a guidebook, promotional videos and a website showcasing the project's products and processes.

The SUARE guide includes healthy ageing, age-related diseases and what to do for healthy ageing, care for older people, centres for older people to apply and partner countries' policies on older people for all partner countries and in partner countries' languages. countries. In the SUARE mobile app, there are various brain games that work as exercise, medication reminders, mental training, live location and audiobook content under the heading of healthy ageing and elderly care, also available in all partner countries and in the languages of the partner countries. The SUARE mobile app and guides can be accessed from the project website, Salto, the E+ link and the project's social media pages.



THE SUARE TEAM



2022

USA RRE



INDEX

INDEX

1. ABOUT THE PROJECT	9
2. PROJECT PARTNERS	14
2.1. ANKARA INTERCULTURAL RESEARCH ASSOCIATION -ANKADER	15
2.2. GALIA MEDIA	15
2.3. BATMAN LOCAL HEALTH DIRECTORATE.....	16
2.4. PSYCHOLOGY SOCIETY	16
2.5. ASSOCIATION CULTURELLE DES JEUNES TURCS DE BAR.....	17
2.6. COMPASS - BERATUNG, BEGLEITUNG UND TRAINING GEMEINNUTZIGE GmbH.....	18
2.7. INERCIA DIGITAL SL	19
3. NEEDS ANALYSIS.....	21
4. INTRODUCTION TO THE MOBILE APPLICATION SUARE	51
5. INSTRUCTIONS FOR THE SWARE MOBILE APPLICATION	55
6. PROJECT ACTIVITIES.....	57
6.1. TRANSNATIONAL PROJECT MEETINGS (TPM).....	58
6.2. LEARNING, TEACHING AND EDUCATION MEETINGS.....	60
6.3. MULTIPLIER EVENTS - (MP).....	60
7. CONTENT OF THE SUARE MOBILE APPLICATION	61
7.1. WHO ARE OLDER PEOPLE?.....	62
7.2. PSYCHOLOGY OF OLD AGE AND SPIRITUAL/PSYCHOLOGICAL NEEDS OF OLDER PEOPLE.....	64
7.3. WHAT ARE THE PHYSICAL AND COGNITIVE ILLNESSES OF OLDER PEOPLE AND WAYS TO PREVENT/REDUCE THEIR EFFECTS?	68
i. Depression.....	69
ii. High blood pressure (hypertension).....	72
iii. Neck pain	75

iv. Knee pain.....	76
v. Dementia.....	77
vi. Low back pain.....	79
vii. Cholesterol	80
viii. Eye pressure	82
ix. Urinary incontinence	82
x. Alzheimer's disease	84
xi. Obesity	86
xii. Osteoporosis	88
xiii. Myocardial infarction.....	90
7.4. THE SITUATION OF OLDER PEOPLE IN SPAIN.....	91
7.5 WHO ARE THE CARERS OF OLDER PEOPLE?	122
7.6 WHAT ARE THE CENTRES TO WHICH OLDER PEOPLE CAN GO	128
7.7 PRIVILEGES FOR OLDER PEOPLE	144
7.8 EMERGENCY NUMBERS	152
8. EXPERT OPINION ON THE SUARE PROJECT	153
9. OPINIONS AND RECOMMENDATIONS ON PHYSIOTHERAPY FOR OLDER PEOPLE	175



US ARE



ABOUT THE PROJECT

About the project

By 2030, one in six people in the world is expected to be aged 60 and over. The number of people aged 60 and over is expected to increase from 1 billion to 1.4 billion in 2020, and by 2050, the population aged 60 and over is expected to double (2.1 billion). Between 2020 and 2050, the number of people aged 80 and over is expected to triple, reaching 426 million". Moreover, the proportion of people over 60 is increasing not only in developed countries but also in lower and middle class countries. Income (World Health Organisation).

The next decade builds on the "World Health Organization (WHO) Global Strategy and Plan of Action" and the "UN Madrid International Plan of Action on Ageing" and supports the implementation of the "UN 2030 Agenda for Sustainable Development" and the "Sustainable Development Goals". The Decade for Healthy Ageing (2021-2030) aims to reduce health inequalities and improve the lives of older people, their families and communities through collective action. The reason we are running this project is that we want to be part of collective action communities to develop our communities by fostering the digital skills and competences of older people and encouraging young people to develop software on the path to digital entrepreneurship.

The main goal of our project is to make our communities age-friendly. The project aims to promote youth entrepreneurship, including social entrepreneurship, and a sense of initiative by conducting a needs assessment to identify and assess the needs of older people and their families.

The SUARE project aims to improve the lives of disadvantaged older people and their families, and the society they belong to, by developing a digital application that meets the needs of older people and their families and makes their lives easier, happier and less isolated from the society they live in.

The target group of the project, young people, will develop advanced digital skills to develop an application as a concrete objective of the project, which will lead to innovative digital work. In summary, the needs analysis, which identifies the current specific needs and problems of older people, and the innovative digital application for older people are the two main concrete objectives of the project.

The project was undertaken to solve the problem of the growing population of older adults who are no longer able to use technology actively and independently, which has become visible through the pandemic process. Our project was conceived with the elderly's own needs and possible difficulties of use in mind, with the aim of facilitating their adaptation to technology. In this way, they will be able to use technology independently and live in today's world without alienation.

On a positive note, the unexpected and sudden COVID-19 pandemic that has affected human health worldwide has accelerated the deployment of digital information and communication technologies, one of the United Nations Sustainable Development Goals (SDGs). The COVID-19 pandemic has highlighted the importance of having the necessary digital skills and has shown that people of all ages rely more on digital technologies in times of crisis in almost all societies around the world. According to Johnson (2021), "...digital skills pose a greater challenge for older people (digital immigrants) than for the younger generation (digital natives).

A good example of the challenges faced by older people is the knowledge of vaccination appointments for COVID-19".

It is a fact that older people cannot adapt to the use of technology as easily and quickly as digital natives. The COVID-19 pandemic has also shown that the elderly population is unable to use technology actively and independently. Therefore, the SUARE project aims to develop software (digital application) that meets the needs of older people by conducting a needs analysis and facilitating the adaptation of older people to technological innovations by identifying possible difficulties and contradictions they may overcome. encounter during the use of technology.

Because, as Johnson (2021) said: "Older people need to be able to use digital technologies more effectively than ever before. Not only for their health and well-being, but also to keep in touch with family members, to learn about the latest information and to overcome feelings of isolation in general", he stressed the importance and necessity of digitalisation among older people.

SUARE wants to encourage young people to be sensitive to the needs and problems of older people, to develop software for the benefit of society's older population and to encourage older people and their families to acquire/develop digital skills. A dedicated platform is being developed to enable our seniors to build the communication bridges they need most during and after the pandemic.

The expectations of the platform, the SUARE software are as follows:

- Enable social activity for seniors by creating an environment where they can meet their friends and loved ones for a reunion and spend time through video conferencing like in the old days,

- Implementing a system that converts texts displayed with the camera into speech and voice guidance as a solution to age-related vision loss and reading difficulties,
- Putting in place fun and memory-stimulating games with proven benefits for Alzheimer's and dementia patients,
- Adding the "Medication Reminder" feature, which reminds seniors of the medications they need to take regularly to protect their health, while ensuring that their loved ones are informed through notifications that they are taking their medications,
- And to ensure that seniors can use location services independently without fear of getting lost when they are outdoors, allowing them to provide notifications to their families and loved ones through live location.

In this way, one of our main goals is for seniors to use the digital application as autonomously and actively as possible to age healthily and overcome the feeling of social isolation by adapting to the digital world. The project will provide convenient, user-friendly and free access to innovative software by producing assistive technologies that improve the functional abilities and well-being of older people in communities.

The project was developed with the idea that older people will use the application as independently as possible. Detailed descriptions of the application components can be found under the headings Introduction to the application and Application guidelines.



PROJECT PARTNERS

2. PROJECT PARTNERS

2.1. ANKARA INTERCULTURAL RESEARCH ASSOCIATION - AKAD



Die Ankara Intercultural Research Association wurde 2021 in Ankara gegründet, um zivilgesellschaftliche Aktivitäten zu ermöglichen und zu entwickeln und um Forschung für interkulturelle Interaktion zu betreiben. Die Ankara Intercultural Research Association wurde von 7 Personen gegründet, die sich aus Architekten, Ingenieuren, Ernährungswissenschaftlern, Akademikern und Geschäftsführern zusammensetzen. ANKADER hat insgesamt 16 Mitglieder, darunter 5 Vorstandsmitglieder und 3 Aufsichtsratsmitglieder.

Da die Vorstandsmitglieder von ANKADER an verschiedenen Erasmus+-Projekten teilnehmen, verfügen sie über Erfahrung in diesem Bereich. ANKADER ist Koordinator des KA205-Projekts "Software Utility For Age Responsive Effects - SUARE" und führt außerdem zahlreiche Projekte in verschiedenen Bereichen durch.

2.2. GALIA MEDIEN

Galia Media ist ein in der Türkei ansässiges Medienunternehmen, das umfassende Dienstleistungen und Beratung bei der Anwendung verschiedener ITC-Technologien (3D-Druck, 3D-Modellierung usw.) in den Bereichen Lehre, Design, Herstellung und Dokumentation von Installationen für den MINT-Unterricht (Wissenschaft, Technologie, Ingenieurwesen und Mathematik) anbietet, einschließlich der Erstellung verschiedener Lösungen für Websysteme (Webdesign, Software) und Handel (Corporate Identity, Werbung, E-Commerce).

Aufgrund direkter Erfahrungen in der wissenschaftlichen Tätigkeit und/oder nationalen Projekten verfügt das Unternehmen über Expertise in vielen projektbezogenen Bereichen: Industrie 4.0, Innovation, Robotik, technische Kreativität, additive Fertigung, Produktentwicklung, technologisches Unternehmertum, technische Bildung und berufliche Bildung.

2.3. BATMAN LOKALE GESUNDHEITSDIREKTION



T.C. SAĞLIK BAKANLIĞI
BATMAN
İL SAĞLIK MÜDÜRLÜĞÜ

Um die Ressourcen effektiv und effizient zu nutzen, werden die Leistungen von unserer dem Gesundheitsministerium angeschlossenen Direktion, den unserer Direktion angeschlossenen primären, sekundären und tertiären Gesundheitseinrichtungen und unserer lokalen Gesundheitsdirektion auf Provinzebene erbracht. Unserer Direktion sind 8 Gesundheitseinrichtungen angegliedert. Außerdem werden Gesundheitsdienste für Gemeinden und Familien angeboten. Insgesamt sind 5.700 Mitarbeiter und 1.800 Praktikanten in unserer Einrichtung tätig. Ziel ist es, in den Gesundheitseinrichtungen, die unserer Direktion angeschlossenen sind, einen angemessenen, qualitativ hochwertigen und zugänglichen Gesundheitsdienst mit hohen Ausbildungsstandards anzubieten. In Übereinstimmung mit den Vorgaben des Gesundheitsministeriums, Abteilung Qualität und Akkreditierung, bestehen die Gesundheitseinrichtungen unserer Einrichtung jedes Jahr die Qualitätsakkreditierung. Die Abteilung für Qualität und Akkreditierung im Gesundheitswesen ist an unserem Projekt beteiligt

2.4. PSYCHOLOGIE GESELLSCHAFT



PSYCHOLOGY SOCIETY

Die Psychologie-Gemeinschaft ist eine Jugendgruppe, die sich aus Studenten und Absolventen der Fachbereiche Psychologie, Beratung und psychologische Betreuung, Öffentlichkeitsarbeit, Politikwissenschaft und Soziologie an Universitäten in Ankara zusammensetzt. Die Mitglieder der Jugendgruppe bestehen aus Mitgliedern, die an TÜBİTAK-, Erasmus- und YTB-Projekten teilgenommen haben. Die Gruppe hat sich zuvor an verschiedenen Freiwilligenprojekten und Aktivitäten im Bereich der sozialen Verantwortung beteiligt. Unter den Gruppenmitgliedern befinden sich auch Studenten der Fachrichtung Bewertung und Evaluierung, die SPSS-Analysen von Einwanderer- und Flüchtlingsprojekten durchgeführt haben. Der Gründer und die Mitglieder der Psychologie-Gemeinschaft nahmen Anfang 2020 an freiwilligen sozialen Verantwortungsprojekten in der Ukraine teil.

2.5. ASSOCIATION CULTURELLE DES JEUNES TURCS DE BAR LE DUC (KULTURVEREIN JUNGER TÜRKEN IN BAR LE DUC)



Die Association Culturelle des Jeunes Turcs de Bar le Duc wurde gegründet, um die Ziele der "Nachhaltigen Entwicklung" in den Vordergrund zu stellen, die Schaffung von Ökosystemen zu unterstützen und eine innovative Wirkung auf die "Existenz" und die Entwicklungsprozesse von Individuen und Gemeinschaften in der globalisierten Welt zu erzielen.

Die Vereinigung verfolgt folgende Ziele: Entwicklung von Mechanismen und Strategien, die die Entwicklung von Fähigkeiten des 21. Jahrhunderts wie analytisches Denken, digitale Fähigkeiten, Problemlösung auf lokaler und nationaler Ebene, Kreativität und Innovation fördern, um kritische Probleme wie Armut, Migration, Jugendarbeitslosigkeit, soziale Ausgrenzung, Klimawandel und Umweltprobleme zu bewältigen.

Mit einem ganzheitlichen Ansatz und einem multikulturellen Arbeits-/Lernumfeld führt der Verein in Abstimmung mit einem nationalen und internationalen professionellen Netzwerk Schulungen und Projekte durch, wobei er eine designorientierte, innovative Denkweise anwendet, um alle aktuellen Bedürfnisse vom Einzelnen bis zur Organisation zu erfüllen. Unser Verein entwickelt Programme und Schulungsmodule, um die Aufmerksamkeit auf globale Probleme zu lenken, wie z. B. kritisches Denken, designorientiertes Denken, spielbasiertes Lernen, Umweltbildungstools und digitales Geschichtenerzählen, die eine nicht-formale Lernmethodik fördern. Wir entwickeln und implementieren Projekte in den Bereichen soziale Entwicklung, Bildung, Unternehmertum, soziales Unternehmertum, kritisches Denken, Design Thinking, ICT Game Development und Digital Storytelling. Gleichzeitig organisiert es Aktivitäten zur Förderung des sozialen Lernens auf allen Altersstufen unserer Gesellschaft mit kulturellen und künstlerischen Aktivitäten (Festivals, Workshops usw.).

2.6. COMPASS - BERATUNG, BEGLEITUNG UND TRAINING GEMEINNÜTZIGE GmbH



COMPASS ist ein privates, gemeinnütziges Unternehmen mit interkulturellem Schwerpunkt, dessen Ziel es ist, die berufliche und soziale Integration und Eingliederung von Zuwanderern und Flüchtlingen zu fördern und einen positiven Beitrag zur Förderung ihrer sozialen Eingliederung in die lokale Gemeinschaft zu leisten. Unsere Programme bieten Unterstützung für Menschen, die durch wirtschaftliche, soziale und kulturelle Barrieren unterdrückt werden. Diese Dienste erhöhen die Beschäftigungsfähigkeit benachteiligter Gruppen und sorgen für deren schulische und berufliche Befähigung.

Unser Angebot:

- Bildung und professionelle Beratung,
- Sprachunterricht für Menschen mit Migrations- und Flüchtlingshintergrund
- Alphabetisierungskurse
- Mentorenprogramme für Jugendliche
- Soziopsychologische Unterstützung
- Bildungs- und Berufsberatung für Flüchtlinge und Zuwanderer
- mehrsprachige Beratung für
- Bewerbungstraining und Coaching für Vorstellungsgespräche
- Medienarbeitsplatz für junge Zuwanderer (Radio-, Film-, Fotografie- und kreative Schreibwerkstätten).

Unser langfristiges Ziel ist es, die Aufmerksamkeit der Gesellschaft auf die Bedürfnisse und Hindernisse benachteiligter Gruppen zu lenken, indem wir starke Partnerschaften mit lokalen Akteuren aufbauen, innovative Ansätze in unseren Projekten umsetzen und mit politischen Entscheidungsträgern zusammenarbeiten, um präventive und nachhaltige Lösungen zu finden.

2.7. INERCIA DIGITAL SL



Inercia Digital ist ein 2010 gegründetes andalusisches Unternehmen, das sich auf Schulungen und Innovationen im Bereich digitaler und unternehmerischer Fähigkeiten auf internationaler Ebene spezialisiert hat. Im Jahr 2017 wurde er zum Mitglied der "Digital Skills and Jobs Coalition" der Europäischen Kommission gewählt und erhielt 2015 das Young Innovative Company Certificate von AENOR.

US ARE



NEEDS ANALYSIS

3. NEEDS ANALYSIS

In Spain, in recent years, the general trend has been towards an increase in the elderly population due to factors such as the ageing of the population and improvements in living conditions and medical care. This has resulted in people over 60 years of age making up a significant part of the country's population. This is clear from data from the National Statistics Institute (INE), which in 2021 published that the population over 60 years of age in Spain is approximately 12.4 million, representing 26.6% of the total population.

The quality of life of people over 60 in Spain varies according to various factors, such as their socio-economic situation, their state of health, their level of dependency and their access to services and resources. Despite the influencing factors and the difficulties currently experienced by people over 60, the quality of life of older adults in Spain is relatively high compared to other countries, thanks in particular to the health services, social security and other government programmes available to them in Spain. This is also influenced by the strong culture of respect and care for the elderly in Spain, which influences the satisfaction and well-being of the older population.

The quality of life of older people in Spain is currently following a positive trend, however a few years ago, although their quality of life was already relatively good, thanks to the existence of a social security system and public services, it was negatively influenced by the economic crisis that started in 2008. This is because this crisis had a significant impact on the quality of life of the general population, including older people, because their financial well-being was affected and they had less possibilities to access necessary services.

3.1. NEEDS ANALYSIS

In today's Spain, the population over 60 years of age is facing new challenges that require a more comprehensive approach to ensure the well-being of this vulnerable population. Some of these challenges are the increase in the dependency ratio and in the number of older people living alone. Alongside this, increasing life expectancy has also made long-term care more important than ever, as more and more older people are living with chronic diseases that require care. According to the latest available report (2021) from the Spanish National Institute of Statistics, the average score on the Health-Related Quality of Life Index (HRQoL) for the Spanish population aged 65-74 was 67.3 points out of 100. In contrast, the 2011-2012 Spanish National Health Survey indicated that the average score on the Health-Related Quality of Life Index (HRQoL) for the Spanish population aged 65-74 was 64.3 points out of 100. Although people in this age range have a reasonably good quality of life compared to other age groups, it is important to bear in mind that this is only an average measure and that there may be significant differences in the quality of life of each individual.

If we talk about public policies, the Spanish government has put in place different measures to support the elderly, such as the creation of the Institute for the Elderly and Social Services, which aims to provide services and care programmes for the elderly. But Spanish policies for the elderly will be discussed in more detail in the next section. Finally, although public policies and care programmes for older people in Spain are relatively good, it should be borne in mind that the quality of life of each older person also depends on individual factors and their personal situation, so it is important to continue working to improve the quality of life of older people and to ensure that everyone can live with dignity and well-being.

3.2 Problems

Spain, like the other countries involved in this project, faces a series of problems in caring for the elderly and improving their quality of life, some of the main problems Spain faces in this area being the following:

- Ageing of the population: Spain is one of the most ageing countries in the whole of the European Union, due to the fact that our population over 65 years of age represents around 19% of the total Spanish population. This ageing of the population represents a major challenge for the dependency care system, as it implies an increase in the demand for services and resources for the elderly.
- Dependency: Many older people in Spain require assistance to carry out daily activities such as personal care, mobility and feeding. The main causes of dependency are chronic diseases, disabilities or ageing. The Spanish care system must provide quality and accessible services to ensure adequate care for dependent people.
- Care workload: In Spain it is often families who are responsible for the care of their elderly, often due to the financial cost of hiring an external caregiver, so the care system must provide support and resources to alleviate the burden of care for families.
- Loneliness and social isolation: Loneliness and social isolation are common problems among older people in Spain and Europe. Loneliness negatively affects the physical and mental health of older people and means in many cases a greater need for care and health services.

- Financing: The care system in Spain is largely financed by public resources, but the increase in Spain's elderly population implies rising costs and funding challenges. The Spanish government needs to improve the current system to ensure its sustainability and smooth functioning.

3.3 METHODS AND RESULTS

3.3.1 METHOD

The main method of analysis is a questionnaire of 29 questions measured on a scale from 1 (not at all) to 5 (extremely), which was carried out in Spain both online and face-to-face. Before participating in the study, participants were provided with detailed information about the study and were assured that their participation was completely voluntary, always respecting their anonymity. With the implementation of this questionnaire we aim to have a better vision and understanding of the real life of people over 60 years old, in order to find and design better tools and information to increase the quality of life of the target population.

The questionnaire has been designed and carried out by users through Google Forms. We opted for this platform to carry out the questionnaires due to the numerous advantages it offered us, including the customisation options in the design of the questionnaires; its accessibility when distributing them as they can be easily shared via a link and can be completed from any device connected to the Internet, whether a computer, a mobile phone or a tablet; and the automatic collection of responses that Google stores directly in a spreadsheet, thus facilitating the analysis of the data collected during the research.

In addition to the Google Forms questionnaires, a series of interviews were conducted with people over 60 in order to get closer to the research target group and to establish more personal and meaningful communication with them. In addition to answering the research questions, these interviews allowed them to convey their opinions and different points of view.

The participants in the questionnaire are people over 60 years of age in Spain. In Spain, this age group is very diverse in terms of their living conditions, socio-economic situation and health, which influences the quality of life of each person. While some of them are in good health and remain active, others face health and dependency problems, which means that older people face specific challenges that affect their quality of life. For example, those who live alone, have chronic health problems or face barriers to accessing services and resources may find it difficult to meet their basic needs and maintain their well-being. Through the questionnaires we have tried to capture the different views and situations that people over 60 face from their unique and individual position.

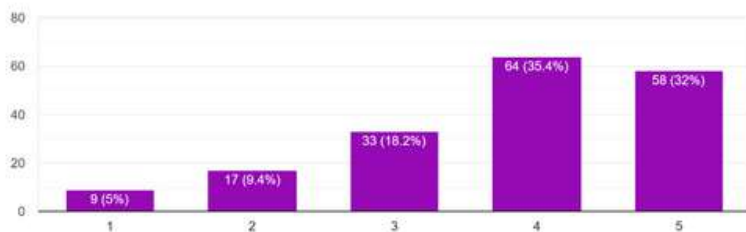
3.3.2 Results

In order to achieve the objectives of the questionnaire, 29 specific questions were formulated. A total of 181 responses were collected from Spain. The response statistics for each of the questions in the questionnaire are presented below.

Question 1. Taking into account your way of life, your expectations, your pleasures and your worries, think about your life over the last two weeks. 2. Thinking about the last two weeks, do you feel that you get the support you need from other people?

Teniendo en cuenta su forma de vivir, expectativas, placeres y preocupaciones, piense en su vida las dos últimas semanas. Pensando en las dos últ... obtiene de otras personas el apoyo que necesita?

181 responses

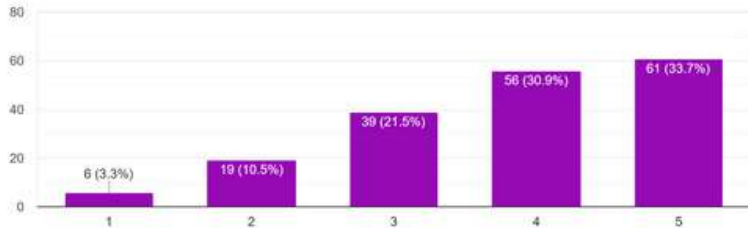


The question asks whether respondents feel that they have received sufficient support from other people in their lives during the last two weeks. The fact that almost 68% of respondents answered "yes" or "extremely" means that, in general, the majority of respondents feel that they have received enough support from other people during the last two weeks. However, there are still a large number of people, more than 30%, who feel that they have not received enough support.

Question 2. Do you receive the support you need from others?

Si sigue pensando en las dos últimas semanas, ¿cree que obtuvo suficiente apoyo por parte de otras personas?

181 responses

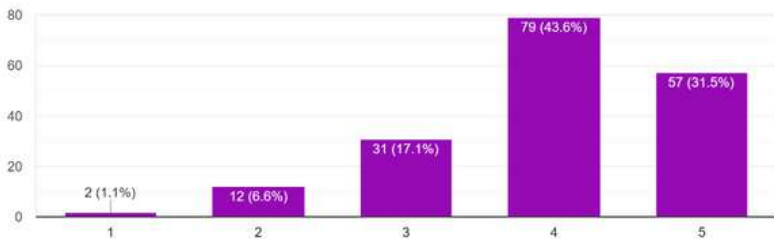


The fact that 64.6% of people responded yes or extremely means that the majority of respondents feel that they receive enough support from others. However, the fact that 35.3% responded no or not enough indicates that there is a significant proportion of people who feel that they do not receive the support they need from others. It is important to note that the support that each person needs may be different, and that what one person considers sufficient may not be sufficient for another.

Question 3. How would you rate your quality of life?

¿Cómo puntuaría su calidad de vida?

181 responses



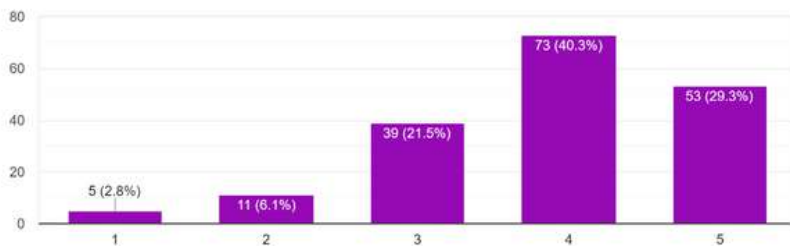
The question refers to a person's subjective assessment of their own quality of life. The fact that 75.1% chose the highest options means that the majority of respondents consider their quality of life to be good or very good. In contrast, the fact that 24.8% chose the lowest options indicates that a significant percentage of people do not consider their quality of life to be good.

It is important to bear in mind that quality of life is a complex and subjective concept that can be influenced by many factors, such as health, personal relationships, social environment, income level, access to services and resources, among others. Moreover, each person's perception of his or her own quality of life may vary over time and according to circumstances. Therefore, it is important to interpret these responses with caution and to take into account the context in which the research has been conducted.

Question 4. Are you satisfied with your health?

¿Cuán satisfecho/a está con su salud?

181 responses

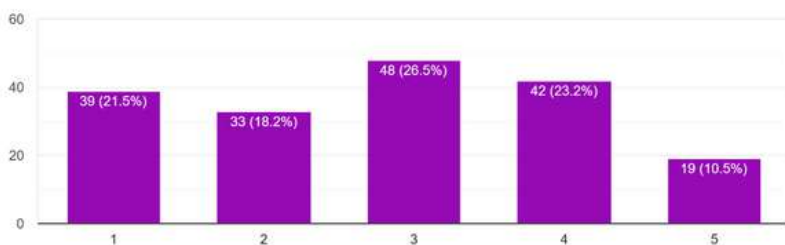


As people age, they may experience changes in their health that affect their quality of life. The fact that 69.6 per cent of older people surveyed chose the highest options indicates that most older people are satisfied with their health. This may be a positive indicator that older people take care of their health and that they have access to services and resources that enable them to maintain a good quality of life. However, the fact that 30.4% of older people chose the lowest options indicates that there is still a significant percentage of older people who are not satisfied with their health. This can be interpreted as a wake-up call to improve the quality and accessibility of health care services and other health resources for the older population.

Question 5. To what extent do you feel that physical pain prevents you from doing what you need to do?

¿En qué medida cree que el dolor físico le impide hacer lo que quiere o necesita?

181 responses

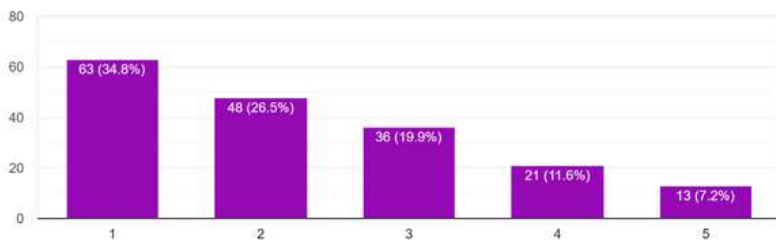


The fact that the least chosen response was "extremely" at 10.5% may indicate that the majority of respondents do not experience physical pain so severe that it prevents them from carrying out essential activities of daily living. However, it is important to note that any amount of physical pain can affect older people's quality of life, especially if it is chronic and persistent. Although most respondents do not experience extreme physical pain, it is still possible that they may experience moderate or mild pain that may affect their ability to perform certain activities.

Question 6. How much medical treatment do you need to function in your daily life?

¿Cuánto necesita de tratamiento médico para funcionar en su vida diaria?

181 responses

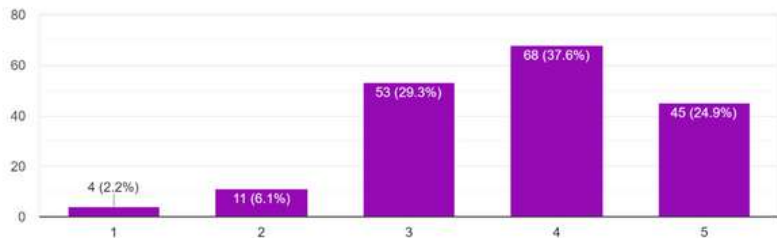


As the most chosen answer was "not at all" with 34.8%, this may indicate that a significant proportion of respondents do not need medical treatment to carry out their daily activities. However, it is important to keep in mind that each person has different needs and health conditions. But overall this is a rather positive response in the framework of the research.

Question 7. How much do you enjoy life?

¿Cuánto disfruta de la vida?

181 responses

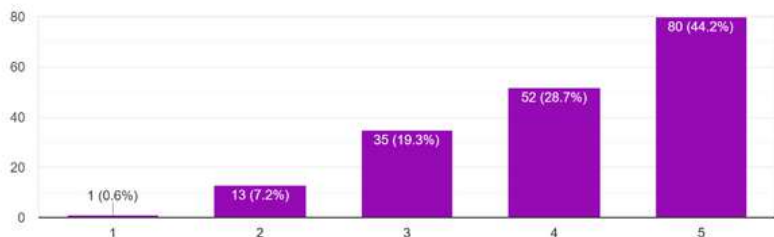


Given that the most chosen response was "quite a lot" with 37.6%, followed by "moderately" with 29.3% and "a lot" with 24.9%, this indicates that a large proportion of respondents enjoy life and experience some degree of satisfaction and happiness in their daily lives. However, it is important to bear in mind that the perception of enjoyment of life can be subjective and vary depending on the individual's personal circumstances.

Question 8. To what extent do you think your life has meaning?

¿En qué medida siente que su vida tiene sentido?

181 responses

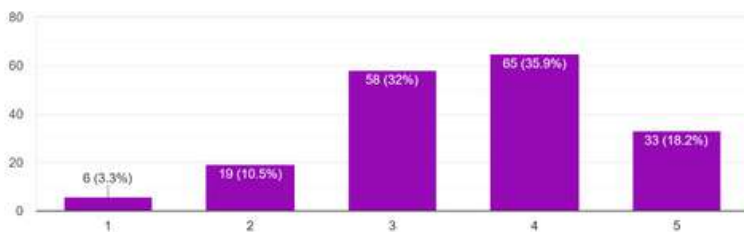


In this question, the most chosen answer was "extremely" with 44.2%, meaning that a large proportion of respondents feel that their life has purpose and meaning. Feeling that life has meaning and purpose is important for people's mental and emotional health, especially in old age, as it can help maintain motivation and general well-being.

Question 9. What is your ability to concentrate?

¿Cuál es su capacidad de concentración?

181 responses

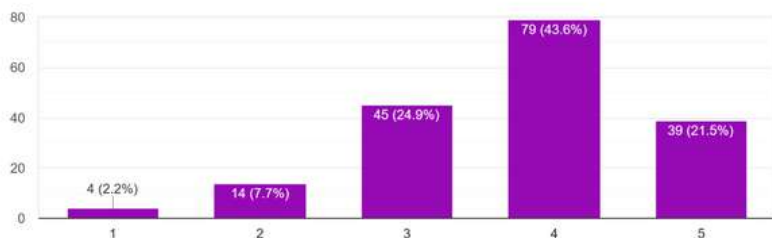


The ability to concentrate is important for the performance of everyday activities, especially in older age where cognitive decline may be more prevalent. Importantly, although a considerable percentage of respondents experience difficulties in concentrating, most of them still feel that they are able to concentrate at least to some extent, which may be an indication that they are taking steps to cope with these difficulties or have found ways to adapt to them.

Question 10. To what extent do you feel safe in your daily life?

¿Cuánta seguridad siente en su vida diaria?

181 responses

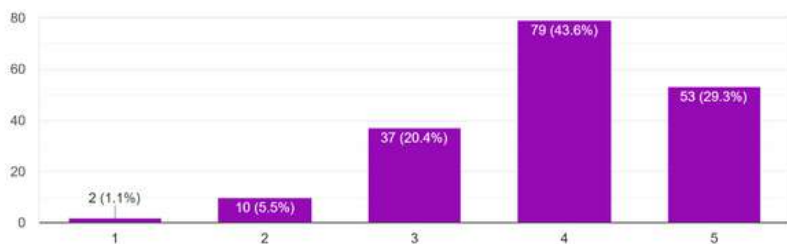


The fact that the most popular response was "quite a lot", with 43.6%, indicates that the majority of older people surveyed feel relatively safe in their daily lives. However, it should be noted that not all respondents answered in the same way, so it is important to bear in mind that there may be people who feel more or less secure depending on their individual circumstances.

Question 11. How healthy is your physical environment?

¿Cuán saludable es el ambiente físico de su alrededor?

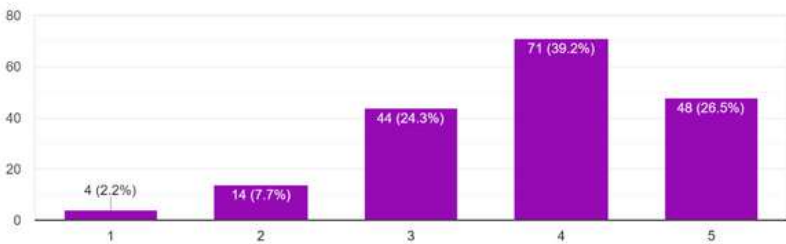
181 responses



The fact that 72.9% chose the highest options in the question on the health of their physical environment indicates that the majority of older people surveyed perceive their physical environment as healthy. This may include aspects such as air quality, availability of green spaces, cleanliness, safety, among other factors that may influence people's health.

Question 12. Do you have enough energy for everyday life?

¿Tiene suficiente energía para su vida diaria?
181 responses

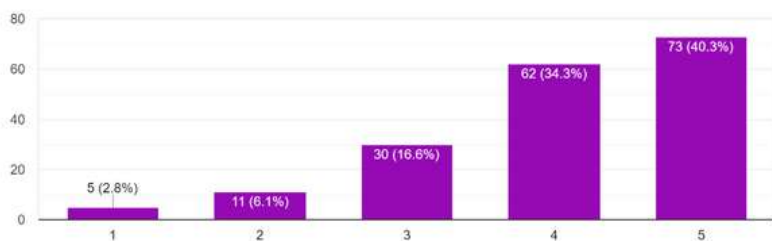


The fact that 90% of people chose the highest options means that the vast majority of respondents feel that they have sufficient energy to carry out the activities of their daily lives. This result may indicate that respondents feel relatively healthy and energetic, and that they do not experience a significant lack of energy that would interfere with their ability to carry out daily activities.

Question 13. Are you able to accept your body appearance?

¿Es capaz de aceptar su apariencia física?

181 responses

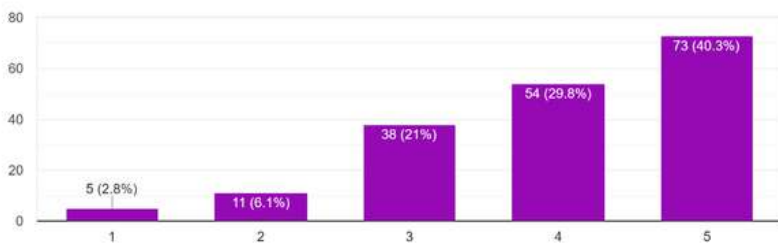


The fact that the most chosen response was "extremely" with 40.3% and followed by "quite" with 34.3% suggests that the majority of respondents are comfortable and accepting of their physical appearance. This may be an indicator of healthy self-esteem and a positive attitude towards ageing and the body in general.

Question 14. Do you have enough money to cover your needs?

¿Tiene suficiente dinero para cubrir sus necesidades?

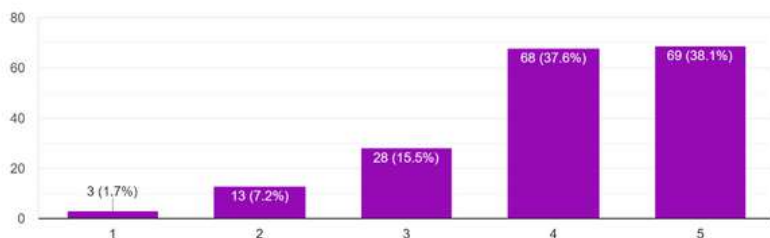
181 responses



The majority of responses to this question were "a lot" and "quite a lot", indicating that a large proportion of respondents are satisfied with their financial situation and consider that they have the necessary resources to cover their basic needs and possibly also some additional expenses. It is important to note that, although a significant proportion of respondents responded in this way, there is still a minority who are in a less favourable financial situation and need additional help.

Question 15. To what extent do you have access to the information you need in your daily life?

¿Tiene disponible la información que necesita en su vida diaria?
181 responses

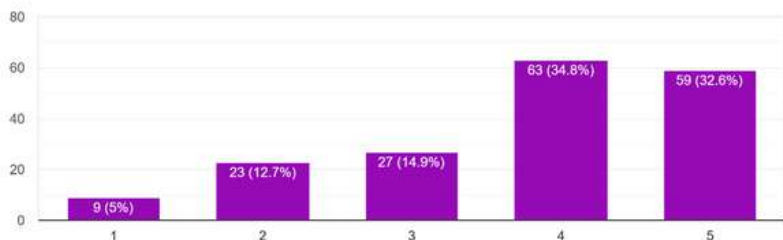


The most popular responses were "a lot" and "quite a lot", with 38.1% and 37.6% respectively, which may indicate that the majority of respondents feel that they have adequate access to the information they need in their daily lives, although there is also a significant percentage of people who may have some difficulty accessing the information they need.

Question 16. To what extent do you have the opportunity to engage in leisure activities?

¿Tiene oportunidad para realizar actividades de ocio?

181 responses

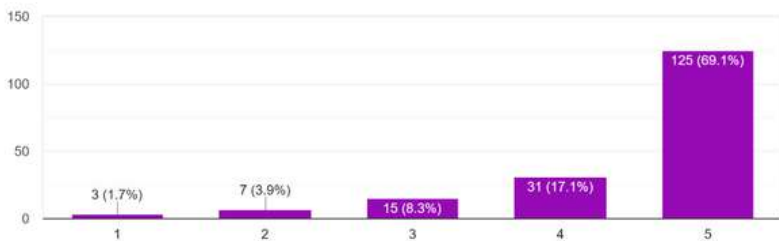


The most popular responses were "a lot" with 32.6% and "quite a lot" with 34.8%, which may mean that the majority of respondents consider that they have the opportunity to engage in leisure activities in their daily lives and that they are generally satisfied with the quantity and quality of their leisure time. However, it is important to note that responses may vary according to geographical location.

Question 17. To what extent can you physically move around?

¿Es capaz de desplazarse de un lugar a otro?

181 responses

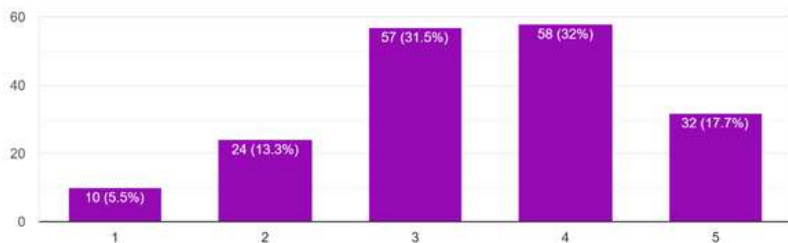


The most popular answer is "completely" with 69.1%, which means that the majority of respondents consider that they can move around without problems and perform their usual movements with ease and without major limitations.

Question 18. How satisfied are you with your sleep?

¿Cuán satisfecho/a está con su sueño?

181 responses

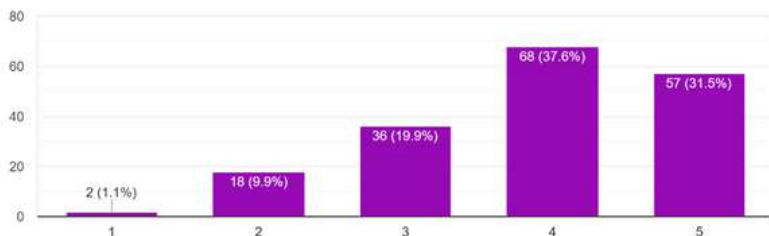


Most respondents are generally satisfied with their sleep, but some of them experience occasional or moderate problems with sleep.

Question 19. How satisfied are you with your ability to perform activities of daily living?

¿Cuán satisfecho/a está con su habilidad para realizar sus actividades de la vida diaria?

181 responses

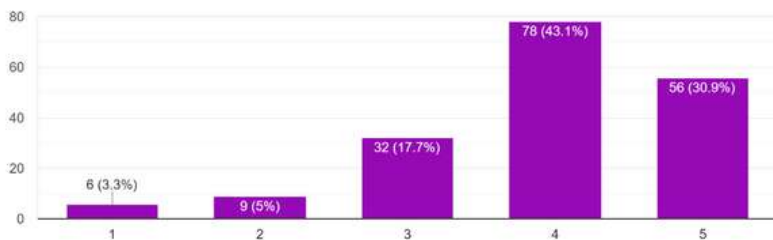


That 69.1% chose the highest options for satisfaction with their ability to carry out activities of daily living indicates that the majority of respondents are satisfied with their ability to carry out daily tasks. The highest options on the scale indicate that respondents do not experience significant difficulties in their ability to perform daily tasks, which may be an indicator of a good general state of health and well-being.

Question 20. How satisfied are you with your ability to work?

¿Cuán satisfecho/a está con su capacidad de trabajo?

181 responses

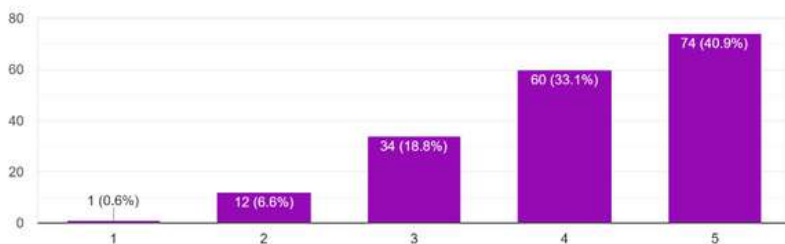


The majority (69.1%) have chosen the highest options, indicating that most respondents are satisfied with their ability to work. They may feel able to perform their daily work tasks without problems and are comfortable with the level of effort they have to invest in their work. However, it is likely that many of the respondents are already retired or close to retirement.

Question 21. How satisfied are you with yourself?

¿Cuán satisfecho/a está con usted mismo/a?

181 responses

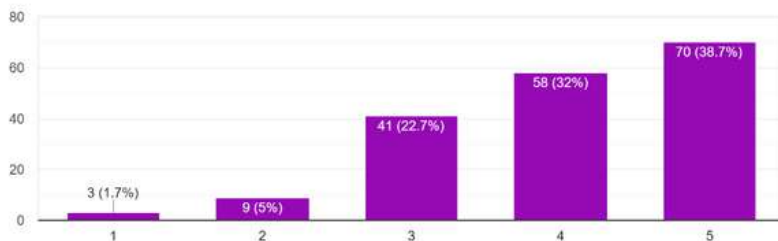


That 74% chose the highest options means that the majority of respondents are satisfied with their personal life and their relationship with themselves. This suggests that they have a positive self-image, feel comfortable in their own skin and are happy with the choices they have made in their life.

Question 22. How satisfied are you with your personal relationships?

¿Cuán satisfecho/a está con sus relaciones personales?

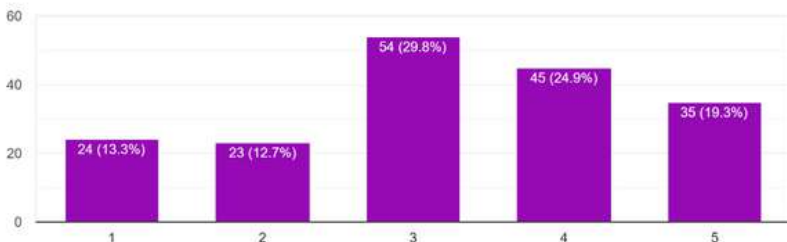
181 responses



The fact that 70.7% chose the highest options on the 1-5 scale indicates that a large majority of respondents are satisfied with their personal relationships. Respondents are likely to have satisfactory relationships with their family, friends or caregivers, which may have a positive impact on their emotional and psychological well-being.

Question 23. How satisfied are you with your sex life?

¿Cuán satisfecho/a está con su vida sexual?
181 responses

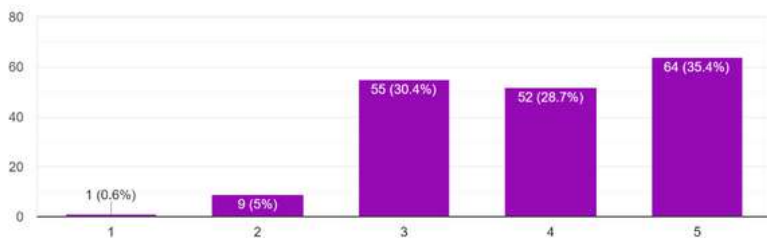


The most frequent response to the question is "moderate", with 29.8%, which may mean that a significant proportion of respondents are not completely satisfied with their sex life, but are not completely dissatisfied either. They may be able to identify some areas where they would like to improve, but they may also feel that they have some things they are satisfied with in their sex life.

Question 24. To what extent are you satisfied with the support you receive from your friends?

¿Cuán satisfecho/a está con el apoyo que obtiene de sus amigos/as?

181 responses

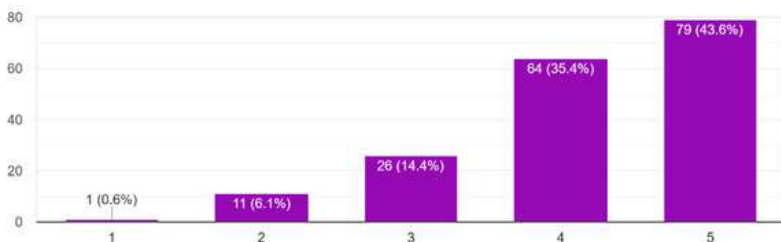


In this question there were practically no low responses, which means that most of the respondents are satisfied or very satisfied with the support they receive from their friends, which is very positive for the mental and emotional health of the respondents.

Question 25. How satisfied are you with the conditions of your housing?

¿Cuán satisfecho/a está con las condiciones del lugar donde vive?

181 responses



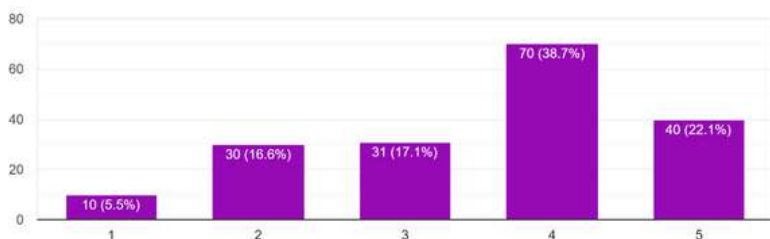
Given that 79% of respondents have chosen the highest options in the question, it means that the majority of respondents are satisfied with their housing conditions.

This suggests that housing conditions may not be a significant problem for the surveyed older population.

Question 26. How satisfied are you with access to health services?

¿Cuán satisfecho/a está con el acceso que tiene a los servicios sanitarios?

181 responses

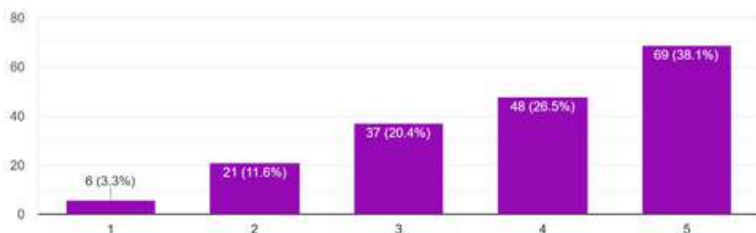


The response chosen was "quite a lot" at 38.7, indicating that a significant proportion of respondents are satisfied with access to health services. Although not the highest response, the fact that the majority of respondents chose moderate or high responses indicates that overall satisfaction with access to health services is good. However, it is important to note that the survey does not provide information on the actual quality of health services accessed by older respondents.

Question 27. To what extent are you satisfied with your transport?

¿Cuán satisfecho/a está con su transporte?

181 responses

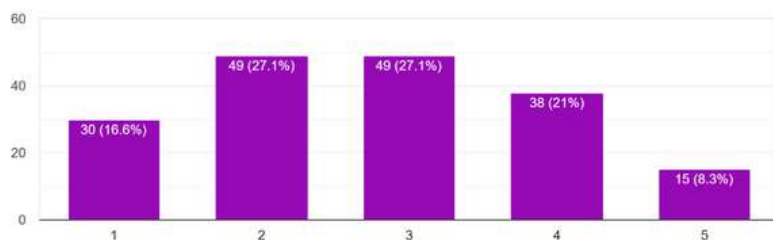


64.6% have chosen the highest options on a scale of 1 to 5, which means that the majority of respondents are satisfied with the transport available to them. Respondents may have access to reliable public transport, transport services for the elderly or family members to help them get around. They may also live in areas with good road infrastructure and transport options.

Question 28. How often do you have negative feelings such as low mood, despair, anxiety or depression?

¿Con qué frecuencia tiene sentimientos negativos tales como tristeza, desesperanza, ansiedad, depresión?

181 responses



The least chosen answer was "extremely" with 8.3%, which means that most of the older respondents do not experience negative feelings extremely often. This could indicate that, in general, the population of older people surveyed is in good mental health and that most of them do not experience these negative feelings extremely often. However, it is important to keep in mind that the survey is only a sample of one group of people and does not necessarily represent the experience of all older people. Furthermore, the question only refers to negative feelings and does not cover other aspects of mental and emotional health.

Question 29. Do you have any comments on the questionnaire?

- No.
- No questions.
- No.
- I think the questions on age are very good, I liked them very much, thank you.
- No.
- Very interesting.
- Volunteering is an advantage.
- All my answers are, of course, in relation to my 77 years, which is what I am. I am active, I get up early and don't go to bed after 12.30, I go to the gym 3 times a week, I read at least 3 hours a day. I go to the theatre, to the cinema and for a walk in the city centre. I am also the president of my community for 15 years, without a property manager. I have made this summary to make my answers easier to understand.

- Hello, at home I am self-employed and I have no choice but to move on and in my case I am physically and mentally well.
- I think if I were on the other side I would be unhappy. Best regards.
- None.
- I'm not very cheerful lately, although I'm doing well in my life.
- Interesting.
- Very interesting questions that make you think and rethink everyday things, I liked it.
- None.
- I have wonderful people by my side who accompany me in a hard battle that life presents me.
- Very curious questions.
- Some questions are very personal.
- Others are very generic.
- Intimista asks a lot of personal information.
- The questions are very generic.
- I found it very simple.
- It is very complete and very good.
- I thought it was great.
- It is well thought out and the interviewer is very qualified.
- I liked it.
- I liked it very much.
- There are no more questions.
- No, it's fine.
- There are NO questions. The transport question I didn't know what to answer.
- Too long. Well put.
- Would have liked to be able to develop some answers.

3.4 CONCLUSIONS AND RECOMMENDATIONS

For the analysis of the data obtained from the 181 questionnaires we used the statistical software SPSS (Statistical Package for the Social Sciences). This software was developed by IBM and is used in different fields such as psychology, sociology, economics and medicine, etc., to analyse data and facilitate the creation of research reports, which is why we used it to analyse our research data. We entered the data into SPSS in the form of a datasheet, namely the one we obtained through Google Forms. Checking the answers obtained by the questionnaire, we can conclude the following:

Talking about the target's feelings (questions 1, 2, 3 and 4), most of them answered between 4 and 5, which means that they feel supported by their environment, have a very good quality of life and are very satisfied with their health.

However, when asked about their experiences with certain things (questions 5 to 17), they expressed that they sometimes experience some pain that prevents them from doing what they want to do (approx. 60% of the participants) and more than 80% need medical treatment for their daily life. However, most of them responded that they enjoy their life very much and find meaning in it (more than 70%). They are able to maintain their concentration, they feel confident and energetic in their daily life, they accept their physical appearance and consider their physical environment to be very healthy, they have the information they need on a daily basis, they have the opportunity for leisure activities and they have enough money for their daily life.

In general, even though they need medical treatment and sometimes have pain to do things in their daily life, they have very good daily experiences and feelings. When participants are asked about their satisfaction or dissatisfaction with some aspects of their life, this is what they say satisfaction with sleep ($\pm 80\%$), satisfaction with ability to do daily activities ($\pm 88\%$), satisfaction with ability to work ($\pm 90\%$), satisfaction with themselves ($\pm 91\%$), satisfaction with personal relationships ($\pm 92\%$), satisfaction with sex life ($\pm 72\%$), satisfaction with support from friends ($\pm 93\%$), satisfaction with conditions where they live ($\pm 92\%$), satisfaction with access to health services ($\pm 77\%$), satisfaction with transport ($\pm 84\%$). Most of the answers are not lower than 80%, but taking into account this score, the aspects that could be improved are sex life and access to health services of the target. Finally, the last question asking about the frequency of feelings similar to moodiness, despair, anxiety or depression, the answers are very divided, but the majority do not feel these feelings, or only sometimes.

To improve the quality of life of people over 60, a number of factors affecting their well-being need to be addressed, such as healthcare, healthy lifestyles, accessibility and adaptation of the physical environment, social inclusion and active ageing.

It is essential that older people have access to quality healthcare, but this can only really be improved through government measures and policies. Even so, projects like ours can improve the quality of life of our elders through, for example:

- Providing them with training in digital tools so that they can enjoy video calls and other digital tools that can be useful for them to connect with their loved ones and with the community in general.
- Preparing recreational and cultural activities for the promotion of intergenerational relationships in order to avoid social isolation and loneliness of older people.
- Informing them about volunteering activities and participation in associations to promote active ageing through their participation in social, economic, cultural, civic and political life.
- Providing them with online information on welfare and social security programmes.



**INTRODUCTION TO THE
SUARE MOBILE
APPLICATION**

4. INTRODUCTION TO THE SUARE MOBILE APPLICATION

SUARE (Software Utility For Age Responsive Effects) contains some suggestions to reduce/prevent the age-related discomforts of the growing elderly population in the world with the possibilities of the digitalised world; It is a mobile software donated by the European Commission and the National Agency of Turkey within the scope of Erasmus+, which includes services such as medication reminder, exercises, mind games, puzzles, live location services and voice text service.



EXERCISE



Increased physical activity is very important for people of all ages. When it comes to older people, the curative and preventive effects of increased physical activity against many physical and cognitive disorders have been scientifically proven thousands of times.

There are exercises for older people in the tab Exercises. In this tab, there are sub-tabs that contain which simple exercises should be done against which disease, how many repetitions or for how long.

MENTAL GAMES



It is scientifically proven that brain games work on memory, keep it vigorous and are good for all memory-related disorders, especially Alzheimer's and Dementia, and is a preventive activity.

From the Mind Games tab, you can access mental training activities such as sudoku, word games, maths problems and puzzles.

MEDICATION REMINDER

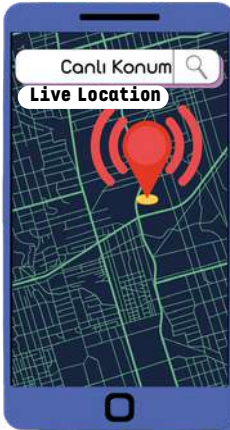


One of the biggest problems caused by the weakening of memory due to old age is forgetting which medicines to take.

This forgetfulness can lead to not being able to use the medicine properly, as well as taking the medicine more than you should.

You can enter the medicines you use and the times you need to take them in the Medication Reminder tab, and you can have the application remind you.

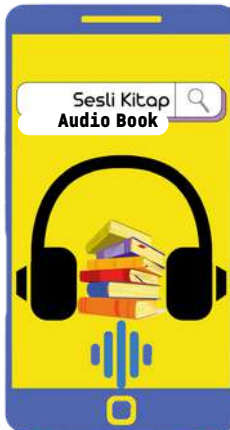
LIVE LOCALISATION



Memory and brain activities, which weaken with age, can sometimes cause the elderly to get lost even in places they know very well. Short- and long-term memory loss can lead to life-threatening situations.

The Live Location tab provides a live location service to inform the relatives of the elderly person through a notification. Through this tab, family members can track the elderly person's whereabouts moment by moment.

AUDIO BOOK



Reading books is one of the most powerful activities that work the brain. Working the brain strengthens memory and thus resistance to cognitive and mental illness. However, the difficulty of seeing with age makes it difficult for older people to see the words in books.

Together with the Audiobook tab, it offers the possibility to listen aloud to the texts displayed with the camera.

SUARE



**INSTRUCTIONS FOR
THE APPLICATION
SUARE MOVIL**

5. INSTRUCTIONS FOR THE APPLICATION SUARE MOVII

Instructions will be added when the application is complete.

SHARE



PROJECT ACTIVITIES

6. PROJECT ACTIVITIES

6.1. TRANSNATIONAL PROJECT MEETINGS - TPM

TRANSNATIONAL PROJECT -I MEETING (TPM I)



The first project management meeting (PMM) of the project was held on 1-2 September 2022 in Ankara, Turkey, organised by the Ankara Intercultural Research Association.

The Ankara Intercultural Research Association was the coordinator of the meeting; other project stakeholders included the Society of Psychology, Inercia from Spain, Compass-Beratung from Austria, Begleitung und Training Gemeinnützige GmbH and the Association Culturelle des Jeunes Turcs de Bar le Duc. During the two-day meeting, the roadmap accompanied by the partners was determined, job descriptions were detailed and the scope of the intellectual outputs was determined. Procedures and rules were determined explaining how and where the budget would be used with the partners. The date of the next meeting (LTT) activity to be held in Diyarbakır was clarified, questions on the general status of the project were answered, feedback was received and the meeting was closed.

TRANSNATIONAL PROJECT MEETING -II (TPM II)

Compass GMBH Austria hosted the second meeting on 10-11 February 2023 in Innsbruck, Austria. The meeting was attended by the Ankara Intercultural Research Association, the Society of Psychology and Inercia Digital from Spain. The meeting discussed the general situation, evaluated the first LTT meeting and presented the Turkish and English versions of the guide. The date of the next LTT meeting has been fixed with the partners. The intellectual results were discussed. Next actions were determined and deadlines were set. The technical part of the application is presented and the partner countries are informed about the future processes. The date of the next LTT is set and the meeting is closed.



6.2.(LEARNING, TEACHING AND TRAINING MEETING - LTT)

Learning, Teaching and Training Meetings I (I. LTT)

The first Learning, Teaching and Training (LTT) Meeting of the project was held on 25-29 September 2022 in Diyarbakır, Turkey, organised by Galia Media. The Ankara Intercultural Research Association was the coordinator of the meeting;

As stakeholders in the project, the Society of Psychology, Inercia from Spain and the Association Culturelle des Jeunes Turcs de Bar le Duc from France participated. The prototype of the SUARE mobile application was presented at the first LTT meeting. The scale to be used for the needs analysis was determined. Brainstorming was carried out to improve the interface of the application. Work has started on the development of the content of the guide in the languages of the partner countries. Presentations were made on the situation of older people in the partner countries and on legal, social and economic factors. Participants working in the field of geriatrics shared their experiences and suggested solutions to problems.



6.3. MULTIPLIER EVENTS - MP

Multiplier events will be added in the future.



**CONTENT OF THE
SUARE MOBILE
APPLICATION**

7. CONTENT OF THE SUARE MOBILE APPLICATION

7.1. WHO ARE THE ELDERLY?

The World Health Organisation (WHO) defines the elderly as people over 65 years of age. Ageing does not only mean getting older in years (natural age). However, as the natural age advances, so does the physical, psychological, social and biological age of people and, consequently, their physical, social, psychological and biological needs.

Together with the development of technology, advances in the field of health and medicine, the extension of human life span and decreasing birth rates lead to an increase in the elderly population. The proportion of the elderly population in Turkey is 9.2%. But from another point of view, technology has expanded its presence in all aspects of human life and has also increased people's quality of life.

In this respect, the concept of "healthy ageing" as put forward by the World Health Organisation (WHO) becomes even more important. Healthy ageing is intended to protect the functional capacities of the elderly population. Increasing rates of technology use as older people adapt to everyday life have made it possible to use digital tools for healthy ageing. The use of technological resources in terms of easier access to services, guidance and help in the physical, social, spiritual, etc. areas they need increases the quality of life of older people compared to the past. "For example, with the use of digital technology, older people increase their cognitive abilities, contribute to their physical health and have an independent life".



According to the study published by the Pew Research Center in the US in 2017 (Anderson and Perrin 2017), 59% of those aged 65-69, 49% of those aged 70-74 and % of those aged 80+ are among the elderly. 17% of them have smartphones and this rate is increasing day by day. Mobile applications that will help and guide older people to meet their growing needs as they age and suitable for use by older people have also become a necessity.

With ageing, people's ability to move is restricted.

- Restricted mobility;
- Brain and heart disease,
- Ongoing diseases,
- Loss of function in the musculoskeletal system,
- Decreased ability to balance and increased risk of falls due to lack of movement,
- Decreased growth,
- Bone resorption,
- depression,
- Shortness of breath.
- Causes forgetfulness and many other diseases.

Increased discomfort affects older people both physically and psychologically. Decreased mobility negatively affects the individual's social life, leading to asociality and depression. Therefore, it is important to increase physical activity and exercise for older people. With recommended exercises for older people, healthy ageing aims to prevent or reduce the effects of many ailments.

7.2. PSYCHOLOGY OF OLD AGE AND THE SPIRITUAL/PSYCHOLOGICAL NEEDS OF OLDER PEOPLE

Today, the world's population is increasingly ageing. So much so that, according to studies by the World Health Organisation, while the rate of the world's over 60 years of age in the world was 11% in 2006, this figure is in 2006, this figure is expected to reach 22% by 2050 (WHO 1998, 2007a, 2012). Statistics predict that almost $\frac{1}{4}$ of the world's population will be over 60 years old. of the world's population will be elderly in the near future. People have different needs and psychological characteristics derived from their age in each period of their lives.



As ageing progresses, many problems arise due to ageing. One of these problems is the psychological structure of older people. The psychology of old age has some unique characteristics. If we look at the general characteristics of the psychology of old age, the picture that emerges is as follows:

- A general state of depression or excessive and misplaced optimism and euphoria.
- Excessive preoccupation with the future or impulsive behaviour.
- Self-criticism and anger,
- Feelings of irrational anger towards others,
- Retrospective regret.
- Feelings of worthlessness and inadequacy,
- Quick temper and stubbornness,
- Considering oneself too big or too small,
- Blaming oneself for one's surroundings,
- Feeling lonely,
- Feeling aimless,
- Loss of joy and enthusiasm and inability to enjoy anything.

All the characteristics of the aforementioned psychology of old age are not present in all older people. However, as a consequence of factors such as feelings of worthlessness due to retirement and diminishing economic opportunities, death of spouse and/or social environment, physical and cognitive illnesses caused by age and regrets about the past, the elderly may have a negative mood and be more prone to depression. Depression, which develops in a continuous process, is both the cause and the result of the emotions experienced. As a result of this ongoing negative mood, the older person may feel unequal in life and may expect death or face suicidal thoughts.

Carter and Mc Goldrick (1999) describe old age as the sixth and final phase of the Family Life Cycle, the "Old Age and Retirement" phase. In this phase, children leave home as they marry or find employment, retire from work; the hustle and bustle of life and people's efforts to prepare their children for life have given way to a period of calm and old people alone with their spouses and themselves.

The losses, changes and health problems experienced during this period affect individuals and lead to a decrease in their motivation to enjoy and connect with life. In older age, individuals can cope with conflict if they are able to manage changes in their feelings, thoughts and behaviours, display appropriate attitudes and behaviours in the face of various stressors, and maintain cooperative and sharing relationships. Otherwise, crises may dominate their lives.

According to Erikson (1963), the psychosocial crisis that occurs in old age is called "Integrity of self versus despair". Erikson's Theory of Psychosocial Development mentions that people look back and evaluate their losses and gains as they age. There is "ego integrity" at the positive end of the crises that occur in the period of old age, and "hopelessness" at the negative end. Ego integrity is a balance between loss of bodily strength, deterioration of memory and social loss of productivity and responsibility. Hopelessness often arises as a result of constant stagnation.

At the negative end, there is humiliation and contempt, explicitly or implicitly manifested; the individual is perceived as finished, helpless and weak. The older person not only regrets the lost time and environment, but also loses the areas of identity acquired in earlier periods. Autonomy is weakened, business intimacy disappears and productivity declines.

Older people may develop attitudes such as irritability, scepticism, hoarding and excessive apprehension to protect themselves from the negative mood, fear and anxiety caused by the psychology of old age. Due to the increasing elderly population day by day, it is important to know the unique characteristics of old age psychology to take precautions and establish healthy communication with the elderly.

Tips:

Contact with relatives and close circles of the elderly is important for them to communicate and inform each other. It is an important step to obtain healthy results by trying to eliminate worries and fears in an open and constructive communication and to enable the elderly to lead an active life at a level that does not exceed their declining capacities in order to feel useful at this stage.

One of the greatest needs of the elderly is to see their loved ones with them. The busyness of younger family members in their own work and in their nuclear family often prevents them from spending time with their elders.

The irritability inherent in the psychology of old age may also cause older people to reproach younger family members from time to time. Younger members should respond to reproaches with maturity. At this point, short and frequent visits make older family members feel valued, while allowing younger family members to monitor their physical and personal needs.

Older people need social communication more than anyone else, because of the diminished quality of social life due to retirement and the loss of a spouse or close circle. In this sense, frequent and friendly communication is important in terms of social life needs.

Due to the special circumstances of the family and/or the high care needs of older people, sometimes younger family members may get help from professional care services. As a result, older people may feel more useless, worthless and needy, while younger family members may feel guilty. However, it is perfectly normal to seek professional help, both physical and psychological, when needed. In such cases, younger family members should talk openly with the older person, explain the special circumstances and the reasons for professional help, and prevent the older person from feeling "abandoned" by frequent visits and constant communication in the future. The negative emotional states caused by all these emotional and physical changes can develop into depression for older people. In the course of progressive depression, thoughts of death and suicide may appear in the person. It is vital to monitor the depressive mood and to obtain professional psychological support without delay when it is observed.

7.3. WHAT ARE THE PHYSICAL AND COGNITIVE DISEASES AND WAYS TO PREVENT/REDUCE THEIR EFFECT ON OLDER PEOPLE?

With advancing age, some changes occur in the human body. When the physiological changes experienced exceed a certain level, they cause health problems. Physical health problems that increase with ageing and ways to prevent/reduce them are;

I. Depression

Depression is a psychological disorder that can be observed in all periods of human life. However, the special conditions of each period may show different causes and symptoms from one age to another.

During old age, some changes occur in the vessels, the brain and the chemical structure of the brain. As a consequence, the balance of some chemicals secreted in the brain is altered. Many factors, such as negative mentality (perfectionism, lack of self-confidence), a person's past life history, decline in social life, change in family structure, loss of a spouse, dementia, low socio-economic status and medical disorders can trigger depression.

Rates of depression in the elderly are as high as 20-25%.
Untreated depression can cause ;

- Exacerbation of physiological diseases,
- premature death,
- Suicidal tendencies,
- Decreased quality of life for the patient and family members,
- Increased hospital admissions,
- Deterioration of family relationships over time.



The general symptoms of depression in the elderly are as follows:

- Malaise, restlessness,
- Lack of desire to do anything, loss of enthusiasm,
- Hopelessness, pessimism,
- Sleep disturbances (sleeping too little or too much).
- Worrying about bodily discomfort,
- Having body aches and pains for which doctors cannot find a reason (numbness, indigestion, etc.),
- Inability to concentrate, lack of attention,
- Inability to enjoy previously pleasurable activities,
- Prolonged and persistent low mood (at least 2 weeks),
- Excessive preoccupation with financial problems, mind is filled with unwarranted worries,
- Eating disorders (significant changes in appetite and weight),
- Neglect of daily cleaning and maintenance,
- Feelings of guilt,
- Cannot stop thinking about past failures and mistakes,
- Being unusually emotional and crying often
- Decreased mental abilities, Slowed thinking,
- Indecisiveness.

Tips

Professional psychological support should be sought in the treatment of depression. There may be some subtleties in the psychological support that should be provided to the elderly. For the treatment of senile depression, psychotherapy, antidepressant medication or shock therapy may be used. But the most appropriate treatment should be decided by the psychiatrist.

In addition, the most important role in the prevention and elimination of depression in old age lies with family members and the close social circle of the elderly. Depression in the elderly may be perceived as a weakness of character or as a mental illness. Older people with depression may reject it. Therefore, it would be better to try to get information only about the symptoms and listen to their complaints. It is important for relatives to spend more time with the older person, to listen to themselves, to understand some of the older person's behaviour, to behave tolerantly and to direct them to professional psychological support in case of suspicion of illness.

Considering the role of exercise in the general well-being of the organism and physiological processes, exercises that can be recommended in general are:

- Stretching exercises combined with breathing
- Jumping on the trampoline
- Strengthening exercises with resistance
- Gardening
- High-intensity aerobic exercise (running, swimming, etc.)

II. High blood pressure (hypertension)

If the blood pressure required in the veins for blood circulation is higher than normal, it is called "high blood pressure" or "hypertension". High blood pressure damages the vessels of important organs such as the brain, kidneys and eyes, as well as the heart, leading to heart disease, stroke, narrowing of the vessels, blindness and kidney failure. Common ailments include;

- dizziness
- headache,
- heart pain,
- tinnitus,
- shortness of breath,
- double or blurred vision,
- nosebleeds,
- irregular heartbeat.

However, most people may have no symptoms. In the vast majority of cases of high blood pressure there is no defined cause. There are multiple factors, such as diabetes, obesity, smoking, alcohol, stress, excessive salt intake, insufficient physical activity, unhealthy eating habits and ageing.

Tips

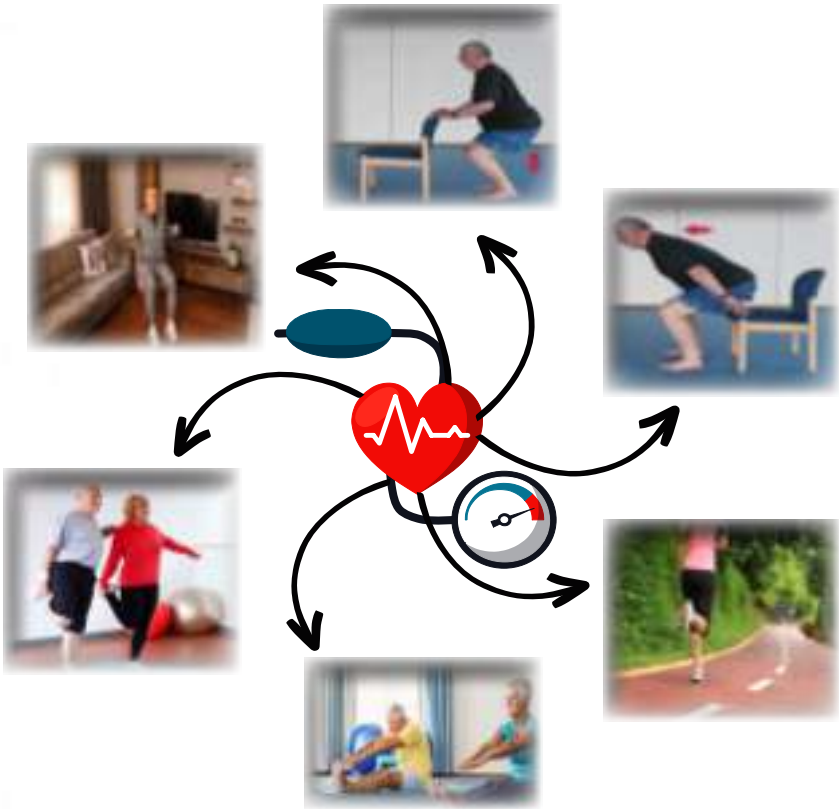
The measures to be taken to prevent high blood pressure must be taken much earlier, before the onset of the disease, as with other diseases of old age. The measures to be taken can be achieved by changing lifestyle and by acquiring some habits and destroying others. Some of the measures that can be taken are as follows:

- Reduce salt intake to less than 5 grams per day.
- Ensure weight control
- Increasing vegetable and fruit consumption
- Avoid foods containing saturated and trans fats.
- Staying away from tobacco and alcohol
- Being physically active and making a habit of it
- Reduce stress
- Measuring your blood pressure regularly

If the disease has developed, use medicines regularly. Do not forget warm-up exercises before starting the main exercises and cool-down exercises after finishing the main exercises. Most importantly, exercise regularly. Those with hypertension and those who want to protect themselves from the effects of blood pressure can do the following exercises:

- Moderate-intensity dynamic aerobic exercise (walking, cycling, swimming).
- Stationary cycling
- Sitting in a chair with resistance equipment
- Climbing stairs with resistance equipment
- Warrior pose (yoga)
- Click to view videos: [1](#) [2](#) [3](#)

1. <https://www.youtube.com/watch?v=jSE9wDSGngA>
2. <https://www.youtube.com/watch?v=IkmZeokwhww>
3. <https://www.youtube.com/watch?v=ztRa35-IM50>



Exercise videos →



III. Neck pain

Neck pain is a very common complaint. Neck pain can have many different causes:

- Spending a lot of time at the computer, in front of the TV or telephone, reading a book lying down, immobility of the neck for a long time.
- The joints in the neck wear out as we get older. As the body ages, bony extensions form, affecting joint movement and causing pain.
- Herniated vertebrae form in the neck vertebrae.
- Injury or tissue damage.
- Certain diseases such as rheumatism, meningitis and cancer.
- Calcification of the neck.

Tips

Don't forget warm-up exercises before starting the main exercises and cool-down exercises after finishing the main exercises. Exercises you can do for neck pain:

- Cervical vertebrae mobilisation exercises.
- Shoulder extension with scapular retraction
- Brugger exercise
- Chin retraction exercise
- Cervical exercises with resistance bands
- Click to watch the videos: [1](#) [2](#) [3](#) [4](#)

1. <https://www.youtube.com/watch?v=UnfTuu5bqr0>
2. <https://www.youtube.com/watch?v=fVm6r6PPZ1w>
3. <https://www.youtube.com/watch?v=p6WYrI6EuN8>
4. <https://www.youtube.com/watch?v=hAuT31hClAa>

IV. Knee pain

The knee is the organ we use the most in our daily life. Therefore, knee pain has many origins:

- Calcification, which usually appears in older people.
- Overweight.
- Rheumatism.
- Injuries and tissue damage.
- Meniscus tears.
- dislocation of the kneecap
- Weakening of the knees due to excessive inactivity.

Tips

Don't forget to warm up before starting the main exercises and cool down after finishing the main exercises. Exercises that you can do for knee pain: 1 2 3

- https://www.youtube.com/watch?v=1Xqc0nYxuY&ab_channel=aktiFizyo
- <https://www.youtube.com/watch?v=0n3E37K-GZQ>
- <https://www.youtube.com/watch?v=27W9PrtQNx4>

V. Dementia

Dementia is a disease of old age that is often confused with Alzheimer's disease. Alzheimer's is a type of dementia, although most of its symptoms are similar. While Alzheimer's is a disease related to a person's nervous system, dementia is a health problem that encompasses the mind in general, due to damage to brain cells. In other words, dementia is the loss of the mind.

Dementia is a health problem that affects the mind in general. It cannot be defined simply as forgetfulness. This health problem can be accompanied by many behavioural disorders that affect daily life. These symptoms progress over time, and in cases such as Alzheimer's dementia, this period can span years.

The clearest symptom of dementia is a short-term memory that is almost nil. In other words, the person may not even remember what happened a minute ago. The disease, which begins with memory problems in the early stages, continues with difficulty in performing physical and physiological activities over time.

Tips

There is no definitive way to prevent dementia, as there is no definitive diagnostic test for dementia, but we do try to take precautions and minimise the risk of dementia by making some changes in our life habits.

All the precautions and advice given for Alzheimer's disease are the same for Alzheimer's disease. Factors such as mental stimulation, physical activity and social interaction, cigarette smoking and quality sleep will help with dementia. In dementia, the main goal is to maintain communal living.

VI. Low back pain

Although low back pain is common in people of all ages, it is one of the most common complaints in old age. The causes of low back pain in general are:

- Lifting heavy objects
- Sudden movements
- straining the waist
- Herniated disc
- Bone and joint damage
- Calcification
- Osteoclasia
- Injuries (falls, blows, etc.)
- Weakening of bones with age
- Overweight

Tips:

Don't forget warm-up exercises before starting the main exercises and cool-down exercises after finishing the main exercises. Exercises you can do for back pain:

- Mobilisation of the lumbar spine
- Gaining flexibility by bringing the knee to the chest
- Bridge exercise
- Exercises in crawl position
- Straight leg raises
- [Click to watch](#) the videos

VII. Cholesterol

Cholesterol is a type of fat found in people's blood. When cholesterol levels are high in the blood, it causes hardening of the arteries and the formation of fatty deposits in the blood vessels. These deposits, which grow over time, make it difficult for enough blood to flow through the veins and cause various health problems.

The main causes of high cholesterol are

- Lack of exercise
- Unhealthy diet
- Obesity (being overweight)
- Cigarette smoking
- Diabetes

Tips

Nutrition and exercise are the main points to consider in preventing high cholesterol. Losing excess weight and exercising greatly prevent high cholesterol. Sports such as walking, swimming, running and cycling should be practised for at least 30-45 minutes a day.

Warm-up exercises before starting the main exercises and cool-down exercises after finishing the main exercises should not be forgotten. In addition, the following exercises should be performed to get rid of the next extra kilos:

- https://www.youtube.com/watch?v=HwaZYOavRRo&ab_channel=Squatgirl

- https://www.youtube.com/watch?v=epFK7DDQxeU&ab_channel=MelisYengil

- https://www.youtube.com/watch?v=-eshty_q6j8&ab_channel=GeriatriFizyoterapistlerDerne%C4%9Fi

VIII. Eye pressure (eye strain)

Eye pressure or glaucomatous disease is the result of increased pressure due to blockage of the channels that drain fluid from the eye and the inability to remove the fluid from the eye.

Tips

Eye pressure can only be lowered with drugs and treatments developed for this disease. To support the treatment

- stop smoking
- reduce high cholesterol
- reduce high blood pressure
- eat healthy
- exercise

In addition to weight loss and light exercises for eye health, some eye exercises can be performed:

1. <https://www.youtube.com/watch?v=qGZX9tuxb60>
2. <https://www.youtube.com/watch?v=GrOueggKOYI&t=172s>
3. https://www.youtube.com/watch?v=GZE8s_yUCYg

IX. Urinary incontinence

One of the most common diseases associated with ageing is urinary incontinence. Urinary incontinence is due to many reasons and diminishes the quality of life of older people, as well as affecting them psychologically. The main reason is that, with ageing, the muscles of the urinary system weaken. Other reasons are;

- Overweight
- Hereditary factors
- Certain medications used
- Excessive alcohol consumption
- Urinary tract infections
- Bladder problems
- Enlarged prostate
- Vaginal infections

Tips

Urinary incontinence can be treated with surgery and medication. Also with some measures and exercises that the person can take on their own, the discomfort can be eliminated/reduced. First of all, the person should eliminate the factors that can cause urinary incontinence. Getting rid of excess weight, reducing alcohol consumption and stopping or reducing the consumption of medications that can cause urinary incontinence under the supervision of a doctor are the main measures a person can take. Warm-up exercises before starting the main exercises and cool-down exercises after finishing the main exercises should not be forgotten. Typically recommended exercises:

- Breathing exercises
- Pelvic floor stretching exercises
- Trunk control exercises
- Bladder training
- Transversus abdominis muscle exercises

In addition, the muscles between the bladder and the urinary tract should be strengthened with simple Kegel exercises that can be applied. Kegel exercises include:

<https://www.youtube.com/watch?v=ixl4nBPq4uA>
<https://www.youtube.com/watch?v=DhnYEV51Fv0>
<https://www.youtube.com/watch?v=8ZdFnozWTo>

x. Alzheimer's

Alzheimer's is a neurological disease in which a person's memory, thinking and language skills gradually regress, and is thought to be caused by the effect of genetic, developmental and environmental factors, and results in the destruction of brain cells over the years. The exact cause of Alzheimer's is unknown. The disease, which begins with forgetfulness in the early period, can reach a level where the person has difficulty performing daily activities on their own. This is why early measures and slowing treatments must be taken.

Alzheimer's, which is a very common disease worldwide, usually begins to appear with advancing age. However, it is an insidious disease that requires early action also in young people and adults.

Gradual memory loss, repeating the same questions and phrases over and over again, forgetting places and people one knows well, impaired speech and language skills and confusion are the symptoms of the disease. The cognitive disturbances caused by Alzheimer's lead to psychological disorders by affecting the person's social life over time.

Although the causes of Alzheimer's are not fully understood, these are some of the possible risk factors that trigger Alzheimer's disease:

- Genetic factors,
- Excess weight (obesity),
- Alcohol and cigarette consumption,
- High blood pressure,
- High cholesterol,
- Diabetes,
- Inadequate and unhealthy diet,
- Insufficient physical and cognitive activity,
- Ageing

Tips

There is no definitive cure for Alzheimer's disease. However, early diagnosis and measures taken at an early age help to slow down the disease and reduce its effectiveness. At the forefront of these are the reduction of possible risk factors and a healthy diet. In addition, socialisation, regular exercise and mental exercises that keep the mind active are important in slowing down the disease. Warm-up exercises before starting the main exercises and cool-down exercises after finishing the main exercises should not be forgotten. Physical exercises that can be performed against Alzheimer's disease:

- Aerobic exercises
- Balance and coordination exercises (tandem walking, side-stepping)
- Strengthening exercises
- Stretching exercises
- Breathing exercises

Physical exercises against Alzheimer's disease:

- <https://www.youtube.com/watch?v=TqPOD1EUZjs>
- <https://www.youtube.com/watch?v=UQmEeJb32uM>
- https://www.youtube.com/watch?v=au3dAlZg_xg

Mental exercises against Alzheimer's:

- <https://www.youtube.com/watch?v=UZVX-DhHAWc>
- <https://www.youtube.com/watch?v=K9VKJrTkAlo>
- <https://www.youtube.com/watch?v=TqPOD1EUZjs>
- Sudoku, chess, brain teasers, etc.

xi. Obesity

Obesity, simply put, is when a person is too heavy for his or her height and the body stores more fat than usual. While obesity invites many diseases, it also greatly reduces a person's quality of life. As people age, their body's muscle mass decreases and the proportion of fat increases. With ageing comes a slowing of the metabolism and the digestive system. As a result, it is inevitable that older people will become obese. Therefore, nutrition is of great importance in old age. In our country, the prevalence of obesity is quite high in individuals over 65 years of age.

Tips

The main goal should be to avoid obesity. Because after a certain age it is much more difficult to lose weight than to gain weight. That is why, as in many other diseases, changing lifestyle and eliminating some habits while gaining others is the most effective method against obesity.

- Reduce calorie intake
- Follow a fluid-based diet
- Reducing salt
- Eat little and often
- Avoid tobacco and alcohol
- Spreading physical movement in all areas of our lives
- Walking briskly
- Swimming
- Exercise regularly

Here are some daily exercises you can do to prevent obesity in old age:

- Moderate- to high-intensity aerobic exercise
- Strength exercises
- Flexibility exercises
- Stretching exercises
- Balance exercises

Don't forget the warm-up exercises before starting the main exercises and the cool-down exercises after finishing the main exercises. Click to watch the videos:

- https://www.youtube.com/watch?v=R_gYWsgjOds
- <https://www.youtube.com/watch?v=3HaQ22DxUQQ>
- <https://www.youtube.com/watch?v=GSUBCoYeqvc>
- <https://www.youtube.com/watch?v=rJkxtE1aEpQ>
- https://www.youtube.com/watch?v=-eshty_q6j8

XII. Osteoporosis (Bone thinning)

Osteoporosis is the weakening and brittleness of the bones due to a decrease in the mineral density of the bone content. The first symptom of osteoporosis, which usually appears after the age of 45, is back pain. The main cause of back pain is small fractures in the weakened bones of the back vertebrae. With the increase in the number of fractures, the person's body experiences

- The spine tilts forward
- a hump is produced in the back,
- shortening in height.
- Factors such as advanced age, menopause, calcium and vitamin D deficiency, chronic diseases, heredity and sedentary lifestyle are some of the reasons for the onset of the disease.

Tips

The main objective is to prevent osteoporosis, which is one of the main causes of many aches and pains. To prevent osteoporosis

- Eat a calcium-rich diet at an early age,
- Increase physical activity,
- Avoid alcohol and cigarette smoking,
- Maintain an ideal body weight,
- A balanced and regular diet,
- Exercise,
- Going out in the sun during the day to get vitamin D.

It is important and crucial to attend medical check-ups on time. Some exercises that can be done to prevent osteoporosis and reduce its effects are the following:

- Jumping rope
- Climbing and descending stairs with weights
- Leg press
- Toe raises
- Cobra Exercise
- Click to watch the videos:

1. <https://www.youtube.com/watch?v=Rb2Au88CTNs>

2. <https://www.youtube.com/watch?v=cVRgBjBIOLY>

In addition, ways to increase physical activity, such as walking up and down stairs rather than escalators in everyday life, walking short distances and standing on public transport for short durations, should be given preference.

XIII. Myocardial infarction

Myocardial infarction is a fatal disease that is a risk for all age groups, but increases in old age. It occurs as a result of reduced or interrupted blood flow in the blood vessels. The causes are often age, gender or genetic predisposition, hypertension, smoking, lack of physical activity, obesity and stress.

Often in some of the patients; It manifests with symptoms such as indigestion, fatigue, restlessness, dyspnoea, tachypnoea, burning in the chest, arm, shoulder, numbness and heaviness.

Tips:

Exercises that can be recommended in general to maintain heart and circulatory health at an optimal level and to gain resistance against disease:

- Stretching exercises combined with breathing.
- Moderate intensity resistance training
- Using an elliptical trainer
- Gardening
- Balance exercises (tai chai, yoga, etc.)

7.4 THE SITUATION OF OLDER PEOPLE IN SPAIN

In Spain there are three different levels to guarantee care for the elderly: these three degrees are moderate, severe and major dependency, thus covering all people who, in one way or another, are dependent on someone else.

According to Law 39/2006, of 14 December, on the Promotion of Personal Autonomy and Care for Dependent Persons, it established the basic conditions aimed at guaranteeing equality of care for dependent persons. To this end, it configured the System for Autonomy and Care for Dependency (SAAD) as a set of assistance mechanisms and economic benefits and aid aimed at promoting personal autonomy and care for dependent persons.

An illness, a mental pathology or the simple advance of age can affect a person's ability to carry out activities of daily living. All of this can lead to a loss of physical and/or mental autonomy and at the same time to a state of dependency in which the person requires help in day-to-day life. In our country we have legislation that establishes the degrees and levels of dependency and very good professional experts in the geriatric sector who work for and with dependent elderly people.

7.4.1 Policies and plans of the Spanish government to improve the quality of life of older people

The Spanish government has implemented a number of policies and plans aimed at improving the quality of life of older people. Among them, the following stand out:

- **Dependency Law:** In 2006, the Spanish government passed this law, which establishes a system of care for dependent persons and guarantees their right to receive services and benefits. The law aims to improve the quality of life of the elderly and other vulnerable population groups.
- **Action Plan for the Elderly:** This plan, approved in 2013, aims to improve the quality of life of the elderly and promote their autonomy and social participation. The plan includes measures to promote the health, education, employment and social participation of older people.
- **National Strategy for Older People:** adopted in 2018, it aims to improve the quality of life of older people and ensure their inclusion and participation in society. The strategy includes measures to improve health care, access to housing, prevention of violence and discrimination, and promotion of personal autonomy.
- **Primary Care Shock Plan:** approved in 2021, this plan aims to improve health care for the elderly and other population groups. The plan includes measures to strengthen home care, telemedicine and disease prevention.

- Active ageing programme: governmental active ageing programme to promote social participation and inclusion of older people in community life. The programme includes leisure, sports, training and volunteering activities, among others.
- Social Tourism Programme for the Elderly: a programme that aims to promote accessible and sustainable tourism for this population group. The programme includes trips and leisure activities adapted to the needs and preferences of the elderly.
- Lifetime Pension Plan: this plan has been announced by the Spanish government to encourage long-term savings and guarantee a stable income for the elderly. The plan will include tax incentives and measures to facilitate access to financial products adapted to the needs of the elderly.
- Mayores Conectados Programme: a programme set up to promote digital training for the elderly, with the aim of improving their access to technologies and favouring their digital inclusion. The programme includes courses and workshops adapted to the needs and preferences of the elderly.
- Palliative Care Strategy: this strategy has been presented by the Government to improve care for people with advanced diseases and at the end of life. The strategy includes measures to ensure access to quality palliative care and to improve the training of health professionals.

These are just some of the policies and plans that the Spanish government has been implementing, approving or proposing over the years to help improve the quality of life of older Spaniards. In addition, the government is also working on other related initiatives to improve dependency care, the prevention of loneliness and social isolation, and access to basic services such as housing and transport.

7.4.2 Is there any type of aid or subsidy for the elderly?

The Order SSI/420/2015, of 9 March (BOE 13/03/15), which establishes the regulatory bases for the granting of subsidies for the elderly, people with disabilities and people in a situation of dependency, within the scope of competences of the Institute for the Elderly and Social Services, establishes different types of subsidies, among others, for care in residential centres for the elderly or people with disabilities and for temporary residence, there are subsidies for residence in centres, including canteen and subsidies for residence in individual cases.

It should be noted that, according to data from the CSIC, the average pension in Spain in 2022 was 1,085 euros per month, while the average price of a place in a residential centre is over 2,000 euros. This difference creates a financial need for elderly people who have to go into residential care.

Law 39/2006, of 14 December, on the Promotion of Personal Autonomy and Care for Dependent Persons, better known as the Dependency Law, came into force on 15 December 2006. From then on, all those who require the assistance of a third person to carry out their daily life activities will have the right to a financial benefit, or an assistance service, when their situation of dependency is recognised.

The Dependency Law offers two main types of aid: services and economic benefits. The type of aid granted is determined by the assessing body of each Autonomous Community, depending on the degree of dependency granted to the patient: moderate, severe or high dependency.

As for the services available, the Dependency Act differentiates between 5 types of services:

- Services for the prevention of situations of dependency and the promotion of personal autonomy. This includes, for example, rehabilitation programmes after surgery, early assistance, etc.
- Telecare services. The beneficiaries of this programme are attended instantly and urgently (e.g. emergency push buttons for elderly people living alone). This makes it possible for dependents to remain in their homes, facing the security and isolation problems that can result.
- Home help services. These services attend to the daily needs of the dependent person in their own home, from home care to personal care, including care for daily activities, as well as help with cleaning, hygiene, food, etc.
- Day and night centre services.
- Full-time residential services.

As for the economic benefits provided for in the Dependency Act, these are established according to the economic capacity of the dependent person, so there is no specific amount.

Some of the economic benefits of the Dependency Law are:

- Financial benefit linked to the service: When it is not possible to access the public service (day centres, night centres, care in public clinics, etc.) and a private service is needed (remoteness of these centres, care in the permanent home, lack of places in public centres, etc.).
- Aid for care in the family environment and support for non-professional carers: In the event that we have to partially or totally abandon the professional sphere, we can receive a financial amount that compensates our financial situation to a certain extent. It is of an exceptional nature and only applicable if it is not possible to access other benefits. It is granted in cases where the carer of the dependent person is a relative (up to the third degree) and has been carrying out these tasks for more than one year prior to the application.
- Aid for the hiring of professional carers: Specific aid is provided for a specific number of hours of personal assistance, provided that the professional carer is registered with the Social Security.

Full-time residential services and financial benefits granted for professional or family environment care are usually reserved for highly dependent persons.

7.4.3 What are the services offered by the Dependency Law in Spain?

The Dependency Law was created to guarantee care for all persons in need of care. This Act created the System for Autonomy and Care for Dependency (SAAD), a set of services and economic benefits aimed at the care and protection of dependent persons. In addition, the Dependency Act entails the configuration of a new citizen's right; that of access to care for dependent persons under equal conditions. This right is closely linked to the concept of personal dignity.

This law protects both dependent persons and their relatives and carers. Therefore, within this law it is foreseen that each dependent person can measure their degree of dependency and, according to this, have access to different services and aid, both the persons for whom it is requested and their relatives and carers, in accordance with their individual situation.

The Dependency Law establishes a series of services to which dependent persons can have access.

- Services for the prevention of situations of dependency and those for the promotion of personal autonomy. These are preventive and rehabilitation programmes carried out by social and health services.
- Home help services are of crucial importance. Attending to the daily needs of the dependent person in their own home, from home care to personal care.
- Telecare services; this is an instant and urgent telephone and face-to-face care service that the elderly person requests by means of a portable device that immediately alerts them via their telephone line. If the incident requires it, auxiliary or medical services come to the home.
- Day and Night Centre Services, centres where the elderly person can spend the day or night depending on the needs of each elderly person.
- Residential Care Services, for those elderly people who require total and constant care, either in public or accredited private centres.

7.4.4 Who is entitled to the Dependency Act?

The aim of this law is to guarantee social and health care for dependent persons. It gave rise to the SAAD (Sistema para la Autonomía y Atención a la Dependencia), which is regulated by the Devolved Regions. In fact, the Autonomous Regions are in charge of assessing and determining the degree and level of dependency of applicants.

To understand who can apply for the Dependent Adults Act, the first thing to know is that the situation of dependency must be recognised by the authorities. The requirements for accessing the Dependency Law are as follows:

- To be in a situation of dependency in one of the degrees established by this law.
- To be legally resident in Spain for at least five years, of which the last two years must have been prior to the date of submission of the application.
- Be declared dependent by the assessment body of the corresponding Autonomous Community through each technical assessment team.
- Be registered in the Autonomous Community where the application is made.

The law establishes 3 types of dependency depending on their degree or level:

- Moderate dependency: This refers to people who need occasional or intermittent assistance to carry out their daily tasks.
- Severe dependency: This refers to people who need help to carry out their daily life between 2 and 3 times a day or extensively and who, nevertheless, do not want the constant help of a carer.
- High dependency: This is the most advanced degree of dependency and is usually treated preferentially. It includes all those who suffer a total loss of physical, mental and sensory autonomy and who require constant help from a carer.

The first thing to be aware of when applying for aid for Dependency is the different limitations, the situation of which may hinder the granting of state aid. Thus, in order to be able to benefit from the aid contemplated in the Dependency Law, the person for whom the application is made must meet three basic requirements:

- Have Spanish nationality.
- Residence in Spain for at least 5 years, two of them immediately prior to the time of application.
- Obtain the declaration of dependency and the corresponding degree of dependency through the competent body of the Autonomous Community in which you live or through the Social Services of your local council.

Similarly, the non-professional carer who wishes to apply for assistance must meet the following requirements:

- Residing in the same municipality or in a neighbouring town as the dependent person for at least one year prior to the date of application.
- Have the physical, mental and intellectual capacity necessary to be able to provide care.
- Formally assume the schedules, tasks and care according to the degree of dependency.
- Facilitate access to the social services of the Public Administrations at all times during the care work.

7.4.5 What are degrees of dependency?

The loss of autonomy, for whatever reason, leads some older people to need assistance or help in their daily living activities, such as shopping, cooking and, in the most serious cases, showering, dressing, eating. , etc. The current law determines the degree of loss of autonomy of the elderly person.

The degrees of dependency indicate the need that the elderly person has to receive help or assistance. Depending on these levels, the State grants a series of aid to cover the needs of the dependent older adult. This aid is known as Dependency Aid.

The prescribed dependency levels allow us to know what the specific needs are in each case, as well as to determine who are dependent people. Therefore, it is important to establish degrees of dependency and levels at the health and legislative levels.

7.4.6 How many degrees and levels of dependency are there?

The law establishes three degrees of dependency based on the care needs of each older adult. To determine the situation of dependency and degrees, the Dependency Situation Assessment Scale (BVD) is applied. Based on this scale, the degree and level of dependency is recognized.

Grade I: Moderate dependence

This first degree of reference frames people who begin to need some help in their daily lives. Not constant help, but punctual in basic daily tasks for which that person requires support at least once a day. These are habitual activities that affect their autonomy and justify such assistance.

Grade II: Severe dependence

A level of severe dependency includes people who need help two or three times a day (basic activities of daily living), without requiring constant attention from the caregiver.

Grade III: Great dependence

People with degree 3 dependency are those who need constant help to carry out essential daily activities. This typology would recognize people with a total loss of autonomy, physical or mental, who need continuous support from another person.

The degrees and levels of dependency are, according to the BVD scale, as follows:

Grade 1: Moderate Dependence

From 25 to 49 points

Grade 2: Severe Dependency

From 50 to 74 points

Grade 3: Great Dependency

From 75 to 100 point

For less than 25 points, the dependency situation is not recognized.

7.4.7 How is the degree of dependency determined in older people?

The assessment is carried out where the person who requests the dependency situation lives by a socio-health professional, it may be the usual one in their home or in the nursing home.

The person in charge of the assessment must have specific training in the application of the Dependency Situation Assessment Scale. On the one hand, it is applied in order to evaluate basic activities. They are considered as such: getting up, eating, personal hygiene, dressing, control of physiological needs and moving around the house.

On the other hand, it is used to evaluate instrumental activities. This scale evaluates a person's autonomy when traveling outside the home, such as making food and household chores, shopping, and managing medication.

Regarding the types of nursing homes, the different types of nursing homes can be classified according to several aspects. The main ones are: According to ownership and according to the user's degree of dependency.

7.4.8 What is the current situation of residential centers in Spain?

Residential centers have experienced a significant increase since 2001. That year there were 239,761 places in Spain distributed in 4,800 centers, which meant that 3.34% of the population over 65 years of age had one of these residential places. As of December 31, 2010, the number of places amounts to 368,805, which implies that, since December 2001, there has been an average annual increase of 11,731 places. There are a total of 5,297 and a coverage index of 4.56. Catalonia, with 60,205 places, is the one with the largest residential offer, followed by Madrid, the Castilian-Leonese community and Andalusia. However, analyzing the coverage index it is observed that Aragón is the community with the highest coverage index followed by Castilla y León. Of the 368,805 places available in residential centers, 25% are public, 27% are subsidized and the remaining 48% are private places. This means that just over half are publicly funded places (52%), although 65% are privately owned places.

Regarding the ownership of residential centers, one in four are public. In all territories the predominance of private centers can be seen, except in Extremadura and the Autonomous City of Ceuta, where public centers represent 67% and 60%, respectively, as well as in the Autonomous City of Melilla, which has two residences, one public and one private. The users of residential centers are, for the most part, elderly people, over 80 years old (67%), whose average age is around 83 years. The average age of entry is 80 years, 81 for women and 79 for men. 66% are women, in addition, almost half are women over 80 years old; 73% are dependent people and 32% have some form of dementia.

The public price of a residential place for a self-employed person (non-dependent place) is 16,818.07 euros per year. The Region of Murcia, La Rioja, the Principality of Asturias and the Canary Islands are below the state average. The annual price of Arrangement differs depending on the type of places. If it is a non-dependent place it is €19,009.12, if it is a place for a dependent person it is €18,960.86 and if it is a psychogeriatric place, €26,582.06.

7.4.9 What are the generic requirements for entry into a residence for the elderly?

Normally, before starting the procedure, it is recommended to make an appointment with the Social Services department where the person resides to verify if all the criteria are met. A social worker will be able to clarify doubts about how to access a public nursing home. If the requirements to access a public or subsidized nursing home are met, the interested person (or a family member) will have to apply for it following the instructions provided by law. The most common thing is that family members or future residents are responsible for the procedures for assigning places in nursing homes. The town hall's social workers can inform which centers have public or subsidized places. However, the modalities could change depending on where you live, so make sure you get the correct information. Once the request has been made, you will have to wait for the results of the allocation of places. Even if the person is suitable, it is likely that they will not be able to access the residence immediately since the waiting times for a place are usually long. Private residences can be an alternative solution also during this waiting period, so while Applying for a place in a public residence, it may be a good idea to check information and availability in private residences.

Each Autonomous Community has legislation that determines the requirements for access to public nursing homes. However, some criteria are common throughout Spain. As a general rule, these requirements consider factors such as:

- Age limits.
- Place of residence.
- State of physical and mental health of the interested person.
- Have obtained a degree of dependency equal to or greater than 2.
- Punctuation.

In the case of private residences, the requirements are much more flexible with respect to public residences. Keep reading to learn more details about the requirements to enter a nursing home and the differences that may exist when accessing public, private and subsidized residences.

The dissimilarities in the regulation of access to residences dictated by the rules of each Community or City Council add to the specifications of each structure. However, the greatest differences in terms of entry requirements in nursing homes are found when public and private residences are compared.

7.4.10 Types of Centers for the elderly in Spain according to ownership

Depending on the ownership of the center, there are the following types of Residences for the elderly.

- **Public nursing homes:** Public nursing homes are those in which the Administration has ownership, with their places financed by the City Council or the Autonomous Community in which they are located. Access to these residences requires compliance with certain requirements:

- Be over 65 years old or 60 if the person suffers from any type of severe or moderate dependency.
- Have been registered in the municipality to which the senior center belongs for at least two years.
- Not suffer from severe behavioral disorders or need health care with hospitalization.
- Be free of sanctions or expulsions in another place assigned by the government.
- Have a medical and social designation as moderate or severe dependent.
- Reach the score determined by a scale to be able to enter the specific residence requested.
- Be a pensioner within the public pension system, the spouse of a pensioner or have the right to social benefits established by the law or international agreement of the IMSERSO.

These requirements are the most general at the state level, but each Autonomous Community can establish its own legislation regarding this matter. To request access to one of these residences, you must be certain that you meet all the requirements and indicate the specific center for which the place is requested. To do this, it is advisable to take into account the number of public places available in each center and the waiting list. This can help when choosing one senior center or another.

- Private nursing homes: Among the types of nursing homes there are also private ones. These centers are owned by a private company and have all the necessary authorizations from Public Organizations to carry out their work as nursing homes.

To obtain access to these centers, you simply have to meet 3 requirements:

- Comply with the established requirements demanded by each private center, as well as the autonomous community of reference.
- Accept the internal regulations.
- Be able to comply with the payment of established fees.

Within private senior centers, three different types of places are offered:

Private places: These are those places to which the user accesses, assuming the entire cost of their place.

- Private places with financial benefit linked to the service [PEVS]: The elderly person who chooses to enter a private residence can benefit from financial aid established according to their degree of dependency and their economic resources: the financial benefit linked to the service or PEVS. This aid is collected within the System for Autonomy and Dependency Care [SAAD] and contributes to financing residential care expenses. The private center that welcomes the elderly must be accredited for this purpose.
- Concerted or collaborative places: These are places that are located within private residences, but are partially or totally financed by the public administration, which is also responsible for assigning said places.
- Concerted residences for the elderly: This is another type of residence for the elderly.

The subsidized places are those mentioned in the previous point, that is, public places within a private residence. To be specific, the subsidized senior centers are managed by private companies. However, the allocation of all places depends on the public administration.

In this way, senior citizens can access these places by meeting the same or very similar admission requirements as those of public residences.

7.4.11 Types of residences for the elderly according to the dependency

When talking about the person's degree of dependence, several distinctions can also be made.

- Residences for autonomous seniors: These are residences intended for those seniors who can take care of themselves, without needing help for their daily routine. However, these users, for some reason, cannot or do not want to live in their usual home and decide to move to these centers. The infrastructures that accommodate these people are designed to provide them with comforts and access appropriate to their age, but they do not have special architectures for completely dependent people.
- Assisted nursing homes: These are residences designed to provide comprehensive care for the people who live in them, since they suffer from some type of physical and/or mental disability.

Its facilities are adapted to all the needs of users and have a broader medical and care team than in other types of centers.

- **Mixed residences:** It is one of the most common types of senior residences. Among the people who apply for their places there are self-employed elderly people, as well as dependent people.

7.4.12 Other types of Senior Centers

In addition to the types of residences for the elderly that have been distinguished, there are other options in Spain when it comes to housing the elderly.

- **Day center for seniors:** Day centers for seniors are spaces where daytime social and health care is offered to seniors who have a certain degree of physical or cognitive impairment, difficulty with mobility or sensory disabilities. There they receive specialized care with a rehabilitative and preventive objective.

Those users who choose to go to a day center will receive individualized care and monitoring, as well as benefit from activities programmed based on the needs of each one. All this in the hands of a multidisciplinary team and always establishing a consensus between the professionals, the person who is going to be treated and their family or reference persons.

Some objectives of the day centers are:

- That the elderly person maintains or recovers autonomy to the extent possible, favoring permanence in the family unit.
- Provide complete and personalized day care in multiple aspects of life: health, social, rehabilitation, community and psychological.

7.4.13 What is the difference between a day center and a residence?

When making the decision about which type of nursing home is best for a given person, the question may arise as to whether one of them should be chosen or whether it is preferable to opt for a day center. To make the right decision, the most important thing is to know the differences between the two.

Dwell time

The day center is a daytime space, in which the user can choose, within the center's hours, the time they want to spend there. This will be established both in days a week and in the duration of your attendance (for example, two days a week in full-time or part-time mode). For their part, in the nursing home, the elderly person may choose a short or long-term stay, they will spend the night at the center and receive care 24 hours a day.

Focus of attention

While in a residence the care may have a more assistive focus, in the day center it is therapeutic and stimulating.

Purpose

The day center aims to develop workshops, exercises and activities in order to promote and strengthen the user's independence as far as possible. It is also about offering the relatives of the elderly person the appropriate support and advice to encourage the maintenance of their relative in their home, if both parties so wish. The residences can care for both eligible and dependent people in a full board regime.

Going to a day center that depends directly on a nursing home can be an interesting first contact with the residential resource. In this way, the day the elderly person needs to enter a temporary stay (for example, for the vacation of their main caregiver) or on a permanent basis, they will already know the facilities and the professional team.

Users

This one is derived from the previous point. The minimum age to access these services is usually the same (between 60 and 65 years). However, in day centers there may be elderly people with mild, moderate or severe dependency, but who go to these places to carry out activities that guarantee a certain independence.

Meanwhile, in nursing homes, in addition to those aforementioned users who have decided to live in these facilities, there are also those who are totally dependent or have a complex health situation who need permanent assistance.

7.4.14 Night center for seniors

A night center is an infrastructure where night-time care is provided to older people to provide solutions to their needs and support the families in charge of their care. This is a service aimed at people over 65 years of age with certain characteristics.

- People in a convalescent process who require help at night, such as getting up to go to the bathroom, and also for some daily activities in the morning (washing, dressing, etc.) before returning home.
- People in a situation of loneliness who are cared for during the day by caregivers, telecare or home help services, but who have no one at night and fear spending them alone.
- Dependent people who do or do not suffer from sleep or behavioral disorders.
- Exceptionally, users of a day center who are waiting to be admitted to a residential center and who cannot be accompanied by anyone in their environment at night.

Our elderly deserve the best care. Therefore, when choosing one of the types of residences for seniors, you must also take into account that the one chosen is the center that guarantees the greatest well-being for them and that covers all their needs.

7.4.15 What services are offered by nursing homes?

The services provided by nursing homes are multiple and are aimed at guaranteeing the comfort and well-being of their residents. Among the services we generally find, the following stand out:

- Healthy and balanced diet for residents, always seeking to improve health.
- Medical and nursing service.
- Personalized and specific care for each person, taking into account their special needs, their pathologies and their degree of dependency.
- Daily administration of the required drugs in cases where diseases requiring treatment occur.
- Periodic reviews of the health status of residents, with the aim of preventing and early detecting any possible illness.
- Transportation of residents in case a transfer to the hospital is necessary.
- Occupational therapy aimed at maintaining the independence of older people or improving it in those who already have some degree of dependency.
- Psychological care for residents.
- Aid to achieve social integration and promotion of activity with other residents to foster social relationships and combat loneliness.
- Stimulation of cognitive abilities in order to prevent degenerative diseases and stay in good condition.
- Periodic visits from family members and boosting relationships between the resident and her family.
- Rehabilitation and physiotherapy services.
- Promotion of physical activities to maintain activity and good physical condition, preventing deterioration and improving health.
- Large, pleasant and bright spaces so that the elderly can walk around and feel at ease.
- Maintenance of the center and its facilities: gardening services, cooking, laundry, cleaning...

7.4.16 Services offered by Spain for older people:

The Residential Care Service for elderly people in a situation of dependency is provided in social centers that, as a replacement for the family home, offer accommodation, coexistence and comprehensive care. There are two types of provision of this service:

1. Residential Care Service in Centers for assisted elderly people: The Residential Care Service for assisted elderly people is indicated, in general, for people over 65 years of age in a situation of dependency in degree II (severe dependency) or III (great dependence).

2. Residential Care Service in Psychogeriatric for older people: The Residential Care service in Psychogeriatric for older people is aimed at people over 65 years of age in a situation of dependency in degree II (severe dependency) or III (great dependency), in those cases in which the existence of serious and ongoing behavioral disorders is added to the situation of dependency.

What is the cost of services for seniors?

Participation in the financing of the service by the user will be conditioned by their economic capacity in the terms provided in the current provisions. They must contribute 75% of their annual net income, excluding extraordinary payments. This contribution can never exceed 90% of the cost of the service.

The Day and Night Center Service offers comprehensive care during the day or night period to people in a situation of dependency, with the aim of improving or maintaining the best possible level of personal autonomy and supporting families or caregivers. .

The Day Center Service for elderly people in a situation of dependency offers comprehensive care during the daytime period with the aim of maintaining or improving the highest possible level of personal autonomy through programs and therapies adapted to the specific situation of each person. This service is aimed at optimizing the quality of life of both the person in a situation of dependency and their socio-family environment, favoring permanence in their usual environment.

Actions offered by the service:

This service addresses, from a biopsychosocial approach, the needs of advice, prevention, rehabilitation, guidance for the promotion of autonomy, care and personal care, favoring the permanence of older people in their family and social environment. Users served full-time must be guaranteed the availability of maintenance services (breakfast, lunch and snack) and adapted transportation, according to their needs.

Profile of person for whom it is intended:

This service is intended for dependent people over 65 years of age to any degree, as long as they do not need to remain in bed and have sufficient family support to guarantee their permanence in their usual environment.

Compatibility regime:

The Day Center Service is compatible with the Telecare Service and with the Home Help Service or financial benefit linked to it, in the cases determined and on a complementary basis.

The Home Help Service is the set of preventive, training, and rehabilitative actions carried out by qualified professionals in the home itself, with the aim of assisting in the basic activities of daily life that the person in a situation of dependency needs. . To preserve home help services for dependent people and maintain employment in this job niche, the Extraordinary Social Action Plan of Andalusia has been approved.

Within the Plan is the Home Help Service Consolidation Program, which grants transfers to Local Entities in Andalusia aimed at strengthening the Home Help Service. This is intended to guarantee adequate coverage of the needs of the dependent population in an emergency situation or with economic difficulties. Access to the Home Help Service financed under this Program is done through Community Social Services.

1. Telecare service: Telecare is configured as an essential service to facilitate the permanence of people in a situation of dependency in the environment in which they live their lives, in some cases as a sufficient instrument to maintain their personal autonomy, and in others, as complementary service to other resources.

It consists of direct and personalized attention in situations of emergency, insecurity, loneliness or isolation, through specialized professionals who provide the necessary support to resolve situations of diverse nature, mobilizing the most appropriate resources for each case.

It is a special device connected to the telephone line that allows you to immediately contact the service through a button (pendant or bracelet type) from anywhere in the home.

Actions offered by the service.

- Professionalized and direct care, knowing at all times the personal and family circumstances in which the person finds themselves. In addition, the necessary resources are enabled to notify the health and public safety services or, in the case of extreme seriousness, referring to the 061 emergency services, as well as to the family members previously designated by the interested person.
- Periodic contact with the beneficiaries of the service, providing them with confidence, security and company.
- Personal monitoring of each beneficiary, which guarantees better provision of the Service.

Service intensity.

The professional attention offered by this service allows beneficiaries to maintain verbal contact through the telephone line, with the push of a button, 24 hours a day, every day of the year and without leaving their home.

Profile of the person for whom it is intended.

All people in a situation of dependency can access this service, regardless of the degree of dependency they have recognized. It is only required that they reside at their usual address and have a landline telephone line.

Compatibility regime.

The Telecare Service is compatible with most services and economic benefits, that is, it can be provided together with other services or benefits in the catalog. It is only incompatible with the Residential Care Service and with the financial benefit linked to the acquisition of a service of this same nature, because it is necessary for the user to reside at their habitual residence.

Criteria for participation in its financing.

Participation in the cost of the service by users is determined by the Territorial Delegation of Equality and Social Policies in accordance with current provisions. Currently, a monthly rate is established to which discounts/bonuses are applied depending on the economic capacity of the user, with the exception of people aged 80 or over, who are exempt from payment.

7.5. WHO ARE ELDER CARE STAFF?

Health and senior care are areas that require professional service. For this reason, health and care personnel related to the elderly must have training and some personal characteristics and skills in this field.

Professional personnel in the field of health and care of the elderly basically; elderly care technicians, caregivers of patients and elderly people, physiotherapists, social workers and geriatricians. The personal characteristics and competencies that professional personnel who provide/want to provide services in this field must have are listed below:

- Love serving older people and enjoys being with them,
- Interested in human health and biology,
- Able to empathize with older people and their families and understand their feelings and thoughts,
- Affectionate, tolerant, patient, smiling,
- Able to plan and implement work,
- Enthusiastic, careful and attentive to his work,
- Responsible, open to cooperation and personal development,
- No physical or mental illness.
- Educated in adult pedagogy,
- Know the first aid rules,
- Patient and communicative.

Elderly care technicians: These are people who provide medical and social care services to help reduce the physical, mental and social insufficiencies of older people that occur with aging. The work areas of this profession are hospitals, elderly care and rehabilitation centers, nursing homes and those who wish to receive private home care services.

Elderly care technicians must undergo two-year training in "Elderly Care" at health science vocational schools of universities or obtain a certificate by participating in the approved "Caregiver and Elderly Care Course" by the Ministry of National Education taught by some universities in Turkey. However, university graduates are more advantageous in terms of training and employment. Elderly care technicians:



- Provides care services that satisfy basic needs such as nutrition, general body cleansing, movement, proper position in bed, etc.
- Performs medical interventions such as injections, bandages, wound care, catheter care, etc., to ensure the application of the treatment planned by the doctor, and administers pharmacological treatments,
- Monitor health indicators daily such as blood pressure, fever, pulse, breathing,
- Apply first aid rules in emergency situations.
- Plans, applies and guarantees participation in occupational therapy programs so that they receive social support and gain self-confidence,
- Helps implement social and physical rehabilitation programs,
- They help increase their communication with each other and with the community.

Caregivers: People who accompany patients who need care, are bedridden, elderly or cannot care for themselves. People who follow the patient's medication, his personal care, his needs and the cleanliness of the room in which he stays, according to the instructions of doctors and nurses, are called caregivers or caregivers of the elderly. The profession's work settings are hospitals, elderly care and rehabilitation centers, nursing homes, and those who wish to receive private home care services.

The functions of caregivers are almost the same as those of senior care technicians. The difference is that caregivers are not required to have a qualification to provide caregiver services.

However, those who have graduated from the Patient and Elderly Care Services of Vocational Training Institutes, Anatolian Vocational Training Institutes or Anatolian Technical Institutes and those who have attended various trainings and courses in the field of Patient and Elder Care and have received a nursing certificate have an advantage in this field. In fact, the training received is necessary to acquire experience in anatomy and physiology, basic knowledge of medications, personal care of the elderly and patients, nutrition of the elderly and patients, first aid and dressing applications, chronic diseases, communication with the elderly and rehabilitation.



Social services specialist: Social work is a field that encompasses all services that can produce solutions to the problems of people from all segments of society, such as the elderly, disabled, youth, women, men, children, and immigrants. Social workers are also people who help in the improvement and development of the situation of the group they are interested in in all aspects. They guide people in need of care, indigent, marginalized and economically deprived so that they can identify their needs and receive the necessary services.

To become a social services specialist, it is necessary to graduate from a 4-year "Social Services" department of a university. The areas of work are the Ministry of Health, the Ministry of Family and Social Services, the Ministry of Labor and Social Security, the Ministry of Justice, the Child Protection Agency, rehabilitation centers, counseling research centers, residences of the elderly, social service centers, courts and various private institutions.



Physiotherapists: Physiotherapy is the field of health that is considered auxiliary health personnel in the field of physiotherapy and helps patients. Physiotherapists help patients with physical difficulties due to illness, disability, injury or aging improve their movement. This area not only serves the elderly. It is the treatment area for all people who need physical therapy. But the elderly also need physical therapy to treat physical limitations caused by aging.

Graduates of the universities' 2-year Physiotherapy departments work as "Physiotherapy Technician", and graduates of the 4-year Physiotherapy and Rehabilitation departments as "Physiotherapist/Physiotherapy and Rehabilitation Specialist".

Professionally, the difference is simple: Physical Therapy and Rehabilitation specialists evaluate patients and decide what treatment method is necessary and, if physical therapy must be applied, what physical therapy method will be applied; Physiotherapists are in charge of applying these methods. The areas of activity are usually hospitals, the Ministry of Health, rehabilitation centres, private clinics, sports clubs, care and rehabilitation centers for the elderly and nursing homes.



Specialists in Geriatrics: "Geriatrics" is a subbranch of internal diseases. In general, it is a branch that deals with "the health and diseases of the elderly." In the geriatrics department, diseases of people over 65 years of age are diagnosed and the necessary treatments are applied. A geriatrician is a doctor who specializes in the prevention and treatment of health problems, often multiple and complex, in older people. They must be specialists in internal medicine and then receive minor training in geriatrics for three years.

When it comes to older people, it is better to consult geriatricians to better analyze their diseases and treatments. Because the most important characteristic of geriatrics is to determine in the initial period which of the symptoms that harm health is a disease and which is the natural result of old age.



7.6. WHAT CENTERS CAN SENIORS REQUEST?

Many seniors need to meet their needs from time to time because their economic, social and physical opportunities are limited with age. In Turkey there are many institutions and organizations that provide assistance and care to older people permanently, part-time or as needed.

Centers and services offered to older people

- 1- Nursing homes,
- 2- Home Care Services,
- 3- Centers for Healthy Aging and Solidarity,
- 4- Social Services Centers for the Elderly,
- 5- Elderly Care and Rehabilitation Centers.
- 6-Palliative Care for the Elderly
- 7- Nursing Home
- 8-Home Health Services

It is possible to receive the services offered from both state and private institutions and organizations. While services received from state institutions are subject to certain conditions and are free of charge, services received from private institutions/organizations are subject to payment of a fee. In addition to all these, there are non-governmental organizations (NGOs) that work for the rights and well-being of older people, services for the needy, assistance and solidarity, socialization activities and services for citizens with disabilities. Alzheimer's disease or other types.

Are elderly care services paid for?

Nursing homes and elderly care and rehabilitation centers affiliated with the Ministry are chargeable. The amount of the fee varies depending on the characteristics of the institution and the room, but older people with economic and social deprivation, people who have the Medal of Independence and people who earn monthly, and older people who accredit not having more income than this, together with their spouses, can benefit free of charge from assistance service centers.

What are the conditions for admission to elderly care services?

a. Conditions for admission to nursing homes:

- Be 60 years old or older,
 - Be able to independently carry out activities of daily living, such as eating, drinking, bathing, going to the toilet, etc.
- Have sanity,
 - Not be a carrier of infectious diseases
- Not be addicted to substances or alcohol that cause addiction,
- Be in a situation of social and/or economic deprivation with a social examination report.

b. Conditions for admission to Elderly Care and Rehabilitation Centers:

- Be 60 years old or older,
- Being in need of special attention and protection periodically or continuously due to physical and psychological regression.
- Have sanity,
- Not be a carrier of an infectious disease.
- Not be addicted to substances or alcohol that cause addiction,
- Be in a situation of social and/or economic deprivation with a social examination report.

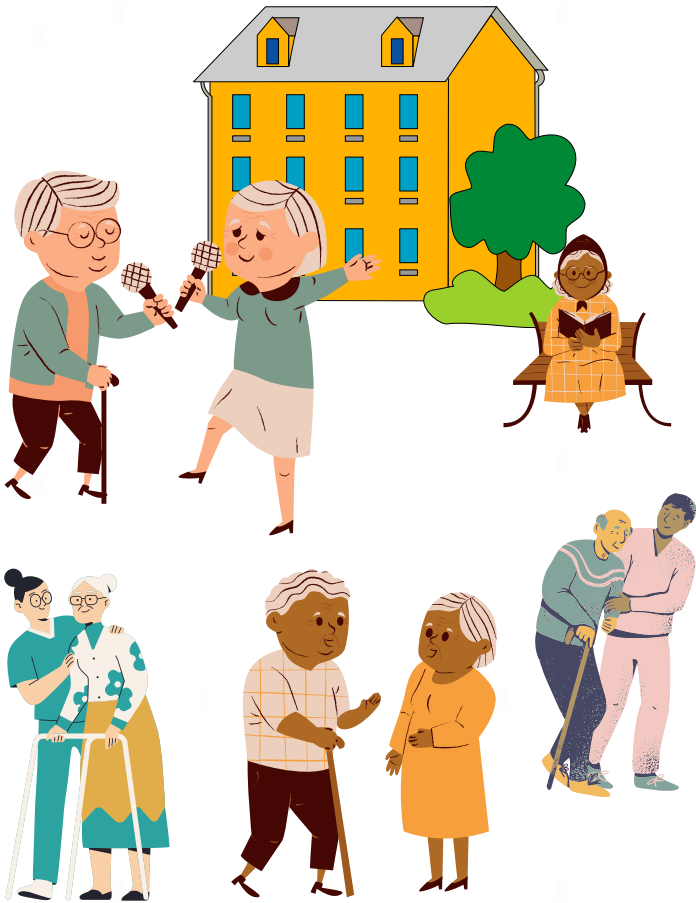
What documents are needed to apply for senior care services?

- 1) Application
- 2) Copy of the Identity Registration Certificate
- 3) Copy of the identity document
- 4) Residence certificate
- 5) Copy of income certificate
- 6) Social Study Report to be issued by the Social Worker,
- 7) Medical Board Report

In the conclusions section of the Health Report, the phrase "There is no harm in entering the Nursing Home" or "There is no harm in receiving care at the Care and Rehabilitation Center Nursing Home" should be included.

NOTE: THE SERVICE COMPLETION PERIOD RANGES BETWEEN 5 AND 30 DAYS.

Nursing homes: Nursing homes provide accommodation, health, psychological support, nutrition, cleaning and social life services to the elderly who do not have enough economic power, who do not have a voice to care for them or who do not have the power to care for them.



What services do nursing homes offer?

In the Regulation on the establishment and principles of operation of nursing homes to be opened within the framework of public institutions and organizations, information on nursing home units is as follows:

-Social service: There are social workers and psychologists for the acceptance of the elderly in the institution, their adaptation and to carry out social and psychological studies.

-Health Service: Composed of doctors, dentists and nurses to carry out health services, such as examination, diagnosis and treatment of the elderly.

-Physiotherapy Service: Consists of a physiotherapist and a nurse to provide services to the elderly who need physiotherapy.

-Nutrition Service: Consists of a dietitian, a restaurateur and a cook to provide nutrition services to the elderly and the nursing home staff.

-Technical Service: Consists of technicians, auxiliary technicians, heater repairers and technician assistants assigned for technical control, repair and maintenance work of the facility building in terms of technical and structural aspects.

Where to request the services of a nursing home?

- Notices made on line Alo 183 are accepted as requests.
- Applications can be submitted to nursing homes, central directorates, Provincial Directorate of the Ministry of Family and Social Services, Social Service Centers in provinces and districts or the General Directorate of Services for the Disabled and Elderly in the place where the elderly reside.
- The request can also be made through E-Devlet.

How is the process after submitting the application?

Seniors whose application process has been completed are admitted, queued or rejected.

The file of the elderly person whose admission is considered appropriate is organized according to the sex of the elderly person, the type of room in which they wish to stay and the date of request. The elder whose turn it is to come is summoned. The old man who does not answer the call is called for the last time. Otherwise, the file is withdrawn from the process.

To consult the list of nursing homes in your province, you can visit the Ministry of Family and Social Services:
<https://www.ailevecalisma.gov.tr/media/6114/3-ozel-huzurevleri.xlsx..>

Home care services: These are services provided to older people, patients who need to continue their treatment after being discharged from the hospital, people who cannot leave home due to chronic illnesses or disabilities, who cannot care for themselves or who do not have to anyone who cares for them at home, who suffer from mental disorders, cannot be accepted because they do not meet the conditions of nursing homes, who are in a terminal phase and must spend this period quietly at home or who only need intermittent care. The Ministry of Health provides free home care services throughout Turkey to eligible elderly people. There are also several private and individual institutions/organizations that provide this service. The cost of the private home assistance service varies.



In the scope of application of Law No. 2828, the Provincial Directorate of Family, Work and Social Services pays financial social assistance to caregivers who care for disabled elderly people to the people who will be in charge of the life of the disabled elderly person. at your home. Disabled elderly people who want to benefit from this social assistance must meet the following criteria:

- The report from the health disability board that must be obtained from hospitals that issue delegation reports, the declaration of at least 50% disability and the phrase "yes" in the severe disability/dependency state section,
- Determine the monthly income of the family unit without taking into account titles, and calculating the number of dependents in the family unit to ensure that it is below 2/3 of the minimum monthly net salary through a verification report. income,
- Determining that the person with a disability needs care and is not capable of maintaining his or her life without help from another person using the report of the board of nursing services evaluators that is within the scope of the provincial directorates, it is necessary.

What are home care services?

- Technical services (simple repairs to be carried out in the homes of the elderly, plumbing, all types of repairs, painting-whitewashing, renovations for the special arrangement of the home according to the needs of the elderly, etc.),
- Health services (dressing, blood glucose measurement, blood pressure measurement, injections, medication monitoring, etc.),
- Psychological support and counseling services (have the elderly meet with a psychologist based on their needs, which are determined after the assessment of the situation, direct them to the health unit, individual interviews and referrals to the relevant units, if necessary , etc.),
- Professional guidance and advice (guidance on medication dosage, payment of bills, acquisition of the supply of diapers, wheelchairs, airflow hospital mattresses, medical supplies, etc.),
- Social support services (talks, shopping, accompaniment of the elderly, etc.),
- Personal care (body cleansing, hairdressing service, etc.),
- Home clean,
- Cooking support services.

Day care services: Day care services are provided to older people who cannot continue their lives alone or despite having other support elements such as family, neighbors, relatives. They are centers that work to improve the environment , assist with activities of daily living and provide social, physical and psychological support services. In day care homes, the elderly go to the center during the day and return home in the afternoon.

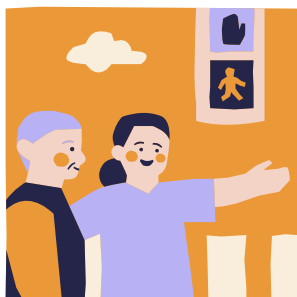
According to data from the Ministry of Family and Social Services, in Turkey there are 161 day centers, some of which are publicly owned, and the majority provide services within the municipality.



Healthy and Supportive Aging Centers: Healthy and Supportive Aging Centers are service centers that provide an environment where seniors can gather, spend quality time, and increase their social and physical activities. In these centers, services such as historical and tourist trips, movie days, porcelain, yoga, gymnastics, jewelry and crafts are offered to the elderly.



Social Service Centers for the Elderly: Generally serving healthy elderly people, also known as "senior club", "senior day care center", etc. In local administrations, in cases where households can continue their lives alone but the support of elements such as neighbors and relatives is insufficient. They are day centers where services are provided to improve their living environment and help them in the activities of daily living so that they can continue their lives in cases where they are insufficient. In addition, these centers also provide home care and home care support services (home cleaning, health, care and repairs, hairdressing, etc.).



Elderly care and rehabilitation centers: These are the centers where elderly people who need the help of another person to carry out their tasks receive services. These centers admit mentally healthy elderly people who do not suffer from contagious diseases, are bedridden, have physical, visual-auditory disabilities and dementia. The treatment of those who do not have sufficient economic power is provided free of charge by the State, and their needs, such as medicines and prostheses, are also provided. In addition, they function as residential social service institutions in which people who cannot be treated constantly receive special care.



Palliative care for the elderly

The Directive on implementation procedures and foundations of palliative care services came into force on 10/09/2014 with the aim of early identification and assessment of pain and other symptoms in patients facing problems arising from life-threatening illnesses, alleviating or prevent their suffering by providing medical, psychological, social and moral support to these people and their families, and act to improve their quality of life.

Palliative care services are provided by palliative care centers in hospital health centers, and by family physicians and home health services units outside hospital health centers. Palliative care services can be provided by hospitalization health centers to people living in residences and nursing homes as long as a palliative care protocol is followed.

Cancer, advanced COPD, stroke (must have lost at least 50% of functions), end-stage renal failure, advanced heart failure, other life-shortening diseases (motor neuron and progressive neurological diseases), ALS, Alzheimer's disease, advanced organ failure (brain and liver diseases), HIV/AIDS, congenital or genetic diseases in children, progressive diseases, etc., and other diseases that threaten life are treated on an inpatient basis in these centers.

When the discharged patient needs maintenance treatment, he or she is delivered to the Home Health Unit for follow-up in his or her family environment.

In this context, older people who need palliative care can also benefit from these services.

- For people age 65 and older, the flu vaccine that falls under the scope of preventive health services is covered once a year, and the pneumococcal (polysaccharide) vaccine is covered once every five years within the scope of the preventive health services. General Health Insurance by the social security institution (SGK) without the need to request a health report.

What is a Senior Living Facility?

Elderly Living Facilities, which are expanded units attached to nursing homes, are homes in which the institution provides all types of services and which consist of a room, a kitchen, a bathroom and a toilet where the elderly They can stay with their spouses. The services offered in nursing homes are also offered in nursing homes. As an alternative to the barracks-type institutional care model, nursing homes were created. In these residences, care staff are in charge of daily household tasks, organizing the kitchen, cooking and supporting the personal care of the elderly.

In addition to the conditions of stay in nursing homes, elderly people need to have the following conditions to stay in a nursing home:

- Demand a change of environment, experience adaptation problems for various reasons during their stay in an institution,
 - Need to stay in a more protected environment due to your health status,
 - Losing your spouse while remaining in the organization with your spouse,
 - Being able to carry out activities of daily living independently after retirement,
 - Among older people who are looking for a safe and quiet environment, who have not yet settled in a nursing home or who are waiting in line to be cared for in a nursing home,
- Those who are considered suitable by evaluating their own requests or those of their relatives may be accommodated in nursing homes.

Are Senior Living Facilities paid for?

The application conditions for residences for the elderly are the same as those for residences for the elderly, and the necessary referrals are made with the applications to the residences for the elderly or to the Provincial Directorates of Family, Work and Services Social. Rates are the same as nursing homes. The application conditions for nursing homes are the same as for nursing homes, and applications can be submitted to the Ministry or through the Provincial Directorates. Rates vary depending on the institution, as in nursing homes. Contact institutions for updated fee information.

7.7 PRIVILEGES FOR THE ELDERLY

7.7.1 Are there tax advantages for older people in Spain?

In Spain, there are some tax facilities and specific benefits intended for older people that may vary depending on the autonomous community and the personal situation of each individual. Some of the common tax benefits and facilities for seniors in Spain include:

1. **Pensions:** Retirement pensions and other Social Security financial benefits are subject to a specific tax regime, and some of them may be tax-exempt or receive favorable tax treatment.
2. **Housing:** In some autonomous communities, older people can benefit from reductions in the Real Estate Tax (IBI) or the Inheritance and Donation Tax in the case of inheritances.
3. **Tax deductions:** Some autonomous communities offer specific tax deductions for older people, such as deductions in the Personal Income Tax (IRPF) or the Wealth Tax.
4. **Aid and subsidies:** Older people can access different aid and subsidy programs, both at the state and regional level, which can help them cover certain expenses related to housing, medical care and other services.
5. **Public Transportation:** In some areas, discounts on public transportation are offered to seniors, making it easier for them to get around.

VAT reduction on certain services: Some services related to elderly care, such as telecare services, may be subject to a reduced VAT rate.

7.7.2 Are there measures for older people regarding consumer rights?

In Spain, older people are a group of more than 8 million consumers. Of course, they have the same rights as any other population group, but more and more associations, including the Organization of Consumers and Users, insist on the need to go one step further and offer greater protection, in terms of consumption, to older people.

There are many situations in which an older adult may see his or her rights as a consumer diminished due to having some type of physical limitation, a health problem or due to something as common as not being aware of the latest technologies. On a daily basis, a senior consumer may encounter extra difficulties, which should be taken into account. From not being able to clearly see the composition of a food product because the letter on the label is only legible for "eagle eyes", to not understanding, with absolute clarity, the conditions of that bank card that someone insists on selling you over the phone or the electricity bill.

Guaranteeing, in practice, the equal rights of all consumers, regardless of their age, is the objective pursued by the OCU initiative (older consumer = greater protection), which calls for a modification to the General Consumer Law that allows the figure of the vulnerable consumer to be included and, within it, the group of older people. Among other concrete measures, it also proposes:

- Guarantee access for the elderly to basic services for a dignified life (water, electricity, healthcare...).
- Consider any abusive situation that goes against a vulnerable consumer a serious offense.
- Require that additional information be provided when an elderly person is the recipient of a good or service (insurance, mortgages, travel, financial products...).
- Ban door-to-door marketing.
- Determine a minimum size in the typography of the labeling of the different products.
- Regulate advertising of products and services intended mainly for older people, so that it is not misleading or causes misunderstandings
- Ensure that companies take into account the specific needs of older people when offering them adequate customer service.

People over 65 years of age in Spain make up more than 18% of the entire population. They are a segment of special interest for companies dedicated to the sale of consumer products, since, as indicated in a study carried out by the consulting firm Kantar WorldPanel, taking into account the current demographic projection, in the year 2030 they would concentrate 29% of the total spending in this sector. Given these forecasts, taking care of the rights of this group of consumers, current and future, who, in some cases present a certain degree of vulnerability, is something that cannot wait.

7.7.3 Are there discounts on monthly utility bills for seniors?

The social electricity bonus is the financial aid offered by the Government so that vulnerable consumers pay less for their bills. The Government has expanded social bonus aid to protect vulnerable consumers. These measures will be in force until December 31, 2023, when the upward trend of the Spanish electricity market is expected to be reduced. The measurements are:

- **Increase in bill discount:** from 25% to 65% for vulnerable consumers and from 40% to 80% for severely vulnerable consumers.
- **Increase in the aid for the social electricity bonus:** the minimum aid for the thermal social bonus goes from €25 to €40.
- **Thermal aid check:** €90 bonus per family receiving the thermal social bonus, available from December.
- **New social bonus:** up to 40% savings on the electricity bill for new vulnerable consumers affected by the energy crisis.

7.7.4 What services do town councils provide to older people?

The City Councils of Spain offer an important home help service for older people and other people who need assistance in their daily lives. This service is provided through home care professionals and is designed to provide personal and/or domestic care at home to elderly or disabled people who need it, with the aim of promoting their independence and personal autonomy. The aim is to achieve maintenance in their own environment and improve their quality of life. The benefits it offers are:

- Personal care: support in personal hygiene, support in mobilization within the home, help in taking medications, help in eating food for those who cannot do it themselves, specific accompaniment outside the home, collection and management of recipes or documents.
- Domestic care: cleaning or helping with the daily cleaning of the home, washing, ironing and organizing clothes within the home, purchasing food and other basic products at the user's expense, preparing meals, basic maintenance tasks for household utensils.

7.7.5 What artistic and cultural services exist for older people?

The central administration, such as the different autonomies, city councils, private companies and cultural and leisure spaces, offer a multitude of services at a reduced price and with numerous discounts and offers for those over 60 years of age. The goal of many of these discounts is for seniors to go out and lead a more active life. For this reason, numerous discounts are established for senior citizens. The reductions occur in cinemas, theaters, museums, concerts, children's shows, opera.... What the first thing does is offer discounts during the week. Meanwhile, the theater does it for the price of a normal ticket, and not specific days. The case of museums is more flexible. What they do is include special rates, some are even free for retirees. But it all depends on the city where you live, so it is best to check the rates they offer for all types of shows in your place of residence.

However, cultural activities are not the only ones that have reductions. There are bonuses for playing sports, which the Administration offers to promote physical activity among older people, for education (free or discounted computer, cooking, language courses) and for shopping (supermarkets like Carrefour have a bonus purchase for retirees).

7.7.6 What rights do older people have regarding transportation?

Spain does not have a law nor a homogeneous model for all cities regarding public transport in urban areas, according to a study carried out by the Spanish Federation of Municipalities and Provinces. Hence, the discounts depend on each Community, province, or region. Public transportation (suburban, metro, bus, tram, light rail, etc.) offers retirees special rates and discounts. Depending on the Autonomous Community, bonuses for seniors vary, and range from free to discounts ranging between 40 and 90%. Normally access to these advantages is processed through a single card.

As for buses to travel, both medium and long distances, the road passenger transport company ALSA offers a discount of up to 40% for people over 60 years of age. This discount is applied to travel to any of the destinations in the service network on 23 national routes, according to the company on its website. This rate applies to services provided from Monday to Thursday and on Saturdays (for Supra and Premium Class it is 20%) and on Fridays and Sundays it is a 10% discount on all services. To do this, you need to register for free in the BlusPlus Club. But Alsa is not the only one, another bus company like Avanza has between 15% and 25% reduction depending on the day for retirees.

Renfe has had the Gold Card for a few years, which can be acquired by all people over 60 years of age, pensioners and people with disabilities. This allows you to obtain discounts according to the conditions established by the company. **This bonus costs 6 euros and offers bonuses on AVE and Long Distance**, there is 40% from Monday to Thursday and 25% from Friday to Sunday. Avant services have 25% from Monday to Friday and 40% on Saturdays and Sundays. Both Media Distancia, Cercanías and Feve apply discounts of between 40-50% for every day of the week.

7.7.7 What health services are available to older people?

Imsero is in charge of the health of the elderly. It is a Social Security Management entity, attached to the Ministry of Health and Social Policy through the General Secretariat of Social Policy and Consumption, and its powers focus on older people. They offer aid and subsidies, care for dependent elderly people and have many centers in which they care for and help the elderly. This organization has more services that it carries out at the state and regional level.

7.8 EMERGENCY NUMBERS

What to do in emergency situations?

- The 112 Emergency Telephone is a free system available to citizens, which provides all the necessary help to resolve any emergency situation in:
- Health matters
- Firefighting
- Rescue
- Citizen security
- Civil protection

112 addresses any circumstance in which the safety and protection of people, property or the environment may be affected. This system offers multilingual attention in Spanish, English, French, German and Arabic. This is a service that integrates all the specific telephone numbers for each body into one:

- Local police
- National Police
- Health emergencies
- Firefighters

If you need to speak to the Civil Guard, you have to call 062 directly. This phone number is available 24 hours a day, 365 days a year and all emergencies are attended to. In fact, from this same number they are in charge of mobilizing the necessary bodies and units depending on what has happened or is happening.

061 is the public health emergency service. It works in all the Spanish Autonomous Communities and serves, in effect, to mobilize an Emergency and Health Emergencies team.

8. EXPERT OPINIONS ON THE SUARE PROJECT

8.1. HEALTH PROBLEMS RELATED TO OLD AGE

Aynur Koyuncu*

*Hasan Kalyoncu University Faculty of Health Sciences, Department of Nursing, Gaziantep, Turkey.

Nursing Department, Gaziantep, Türkiye

Assistant Professor Aynur Koyuncu (Department of Surgical Diseases)

aynrkoyuncu@yahoo.com.tr & aynur.koyuncu@hku.edu.tr

Causes of diseases in human life in the last century Identification of possible factors, solutions for diseases research, production of vaccines and protective, preventive, curative drugs and there has been a rapid increase in the possibilities of reaching humanity. Increasing humanity's access to clean water and clean foods that provide healthy nutrition. The increase in human knowledge rapid increase in average technological advancements expected of humanity resulted in an increase in life expectancy. On the one hand, increasing the average life expectancy of humanity can be achieved as a result of desired and prolonged efforts and efforts. On the other hand, new aging problems have emerged on a global scale. The increase in the average life expectancy of humanity, the world continues to cause a series of problems due to the aging of the population. World Health Organization (WHO) It is estimated that in 2050 there will be 2 billion older adults, and that at least between 125 and 434 million will be over 80 years old. The World Health Organization classifies old age into three categories 246 has classified.

65-74 years; young elderly, 74-84 years; elderly, 85 years and older: considered very old (1). According to 2021 TÜİK data, there are 8 million 245 elderly people in Turkey. The latest elderly population in Turkey would have increased by 24% in five years. While the ratio of the elderly population to the population of Turkey was 8.3% in 2016, this ratio will increase in 2021. It was determined to have increased to 9:7. It was determined that 64.7% of the elderly population is in the range of 65-74 years. The elderly dependency rate, which expresses the number of elderly people per hundred people of working age, is a calculated 14.3%. It has been reported that 561,398 elderly people live alone in Türkiye (2). The elderly population in almost all countries, size, transportation, health, social security, family structure and intergenerational relationships impose heavy burdens on the public. With old age, physiological and cognitive changes begin, the prevalence of long-term care and care dependency in hospitals increases. The proportion of elderly patients increases. Health professionals are needed to provide this care. Addressing the health needs of the elderly population is a branch that requires special knowledge and skills.

Meanings attributed to old age

Humanity has explained the meanings attributed to old age with some theories.

Activity theory: According to this theory, the activity status, lifestyle in the past, socioeconomic level and health status of the elderly person are determined. It is generally accepted that the elderly individual as the effectiveness of society decreases with age, with distance from the individual, the rate of decline of interaction also increases. In old age, some social roles of the individual in case of retirement due to not working, becoming widowed as a result of the death of their spouse disappear.

Role liberation theory: According to this theory, the lost roles of the elderly person negatively affect the existence of the individual towards his family and society. Unable to adapt to the role of older people in society and their lost social status.

Disengagement theory: According to this theory, aging takes time, as a process of withdrawal, withdrawal from society over time is defined. Although the physical capabilities of older people decrease, over time, as they experience distancing from society, they return to their world. Furthermore, this situation is also associated with the loss of the individual's roles in society or their reduction. The opportunities that make an individual socially useful are also reduced over time.

Social change theory: According to this theory, the development of technology, which older individuals in developing societies can "do" and cannot adapt to the pace of change and therefore cannot be equated with those who are not elderly. As a consequence of this change, individuals who cannot renew themselves, cannot keep up with the pace of changes or meet their expectations are considered old-fashioned. This situation causes the older individual to see his security, his love, his respect, his needs such as belonging and being considered, threatened. However, in societies that do not lose their traditional characteristics, the elderly benefit from their experiences thanks to their wisdom. and yet they are considered to have a higher social status (3).

Values about age in society

Social values and attitudes towards aging; Although it can be positive or negative and mixed in all societies, it has a greater tendency to be negative. Determinants of these attitudes towards older individuals in society and influencing factors; lifestyle, educational level, state of motivation in the individual's past, patterns and values that he considers sacred. One of the factors that affect an older individual's respect in society and the continuation of this respect are the values of society. In society there are many value judgments about old age that are transmitted from generation to generation.

One of the social prejudices is that "old people are not productive." However, the characteristic of productivity of some individuals in their past life may continue when they age. Another social prejudice is that 'Your age increases chronically and aging cannot be prevented.' However, social, psychosocial and technological advances have changed the chronological perception of "old age." Real biopsychosocial aging is a concept that must be treated individually, not according to chronological aging. Nowadays, the concept of "individuals are as old as they feel" is accepted. For this reason, it is difficult to determine exactly when aging began. However, the aging of tissues and organs with aging, biological aging is a condition that must be well known. According to this understanding in society, the opinion that older people cannot get along with young people. It's possible. However, older individuals have the possibility of transferring their experiences to younger individuals, and the younger individual has the possibility of renewing the older individual. If the bodily energy and dynamism of the young individual are combined with his wisdom, a more productive society can be formed. Another social prejudice is that "older people are tolerant and not flexible." Life can become a little more stagnant in older individuals. The belief that tolerance and flexibility in older individuals decreases is a mistake. On the contrary, tolerance in older individuals and flexibility may increase.

Being tolerant and flexible should not be considered a characteristic of old age, but of personality. Another social prejudice is that "old age is a static and immutable period." However, this way of perceiving old age is an erroneous social concept. The interaction of various forces acquired throughout life can energize an elderly individual. Another social prejudice is 'Old age is a way to be healthy, it has an obstacle', but being old is not an obstacle to being healthy. It is known that with a regular activity program it is possible to be healthy even at 80-90 years old. Although an active lifestyle does not guarantee longevity, regular activity provides an active, productive, happy and enjoyable life.

Today, social prejudices about aging are gradually changing. Maintaining physical health, being prepared for possible future losses, developing coping strategies, acquiring and performing new roles bring a new philosophy of life to the individual. Thanks to individuals' perspectives on aging and old age, everyone lives their life and old age differently (3).

Retirement and loss of roles in older people

Although old age varies depending on the individual's job, it can impair job performance. For this reason, older individuals may prefer to retire, even in jobs such as workers and civil servants, retirement is a necessity rather than an option at an advanced age. Old age is a period in which the individual experiences the retirement process. If the individual is not prepared to retire, he may feel empty. The loss of productivity and work status of the individual can lead to financial problems, in addition to a decrease in interpersonal relationships. The fact that older people are physically or economically dependent makes them feel useless and worthless, and their self-esteem deteriorates. Adjustment to retirement is related to how the individual perceives retirement. Although many people perceive retirement as not having to do tedious mandatory tasks and having time to pursue their hobbies, this perception can change over time.

These positive emotions can be replaced by negative emotions such as meaninglessness, emotional and physical exhaustion, and loss of roles. Older people who can maintain their productive and constructive faculties and continue producing despite the deterioration of their health can lead meaningful, happy and satisfying lives in positive relationships with their environment (3).

Elderly person and family concept

The family is the main social support structure for older people. Modern life and technological advances have changed the family structure and way of life in our society. In fact, this change has also modified the traditional roles of older individuals in society. The social change, the COVID-19 pandemic, that we have recently experienced has increased the rate of older individuals living alone and weakened kinship ties.

However, the need for love, which is reinforced by family ties, is valid at all stages of life. Unfortunately, this need exists in all societies. It is not satisfied as sensitively and adequately as in childhood. The idea that older people do not have that need leads to a higher rate of loneliness and depression. Reorganization of relationships within the family due to aging may be necessary. Generally, after the loss of an elder's spouse, it may be necessary to decide where, how, and with whom he or she will spend the rest of her life. When making this decision, the elder's preferences should be kept at the forefront. In traditional societies that protect their cultural values, caring for the elderly by their children is considered a norm and an important value. In parallel with global developments, the fact that women, in charge of domestic tasks in Turkish society, are becoming more involved in working life, has caused an increase in the workload in the family. This situation has accelerated conflicts in the family with the elderly and the transformation of the family structure from the extended family to the nuclear family. Due to these reasons, the number of older people living alone has increased (3).

PSYCHOLOGICAL CHANGES DUE TO OLD AGE

A series of psychological changes occur in older individuals. Psychological changes affect the individual's daily living activities, their work and addiction situation, and their interaction with the environment. Of course, in the psychological changes of older individuals there is not always an increase in age in its etiology. The adoption of a sedentary lifestyle, high environmental conditions, a stressful life contributes to psychological changes in elderly individuals can be found. The longing of the elderly is increasing day by day, the young generational differences and conflicts between psychological deficiencies in elderly individuals may be an indicator of the changes (4).

Depression and care

Depression is one of the most common problems in older people. Among the causes of depression in old age, one can count children who leave home because they are making their own lives, a spouse who is left alone for reasons such as loss of life, living alone, status and economic losses. due to retirement, physical and chronic depending on illnesses, dependency on care and deterioration in activities of daily living. Therefore, depression in the elderly for diagnosis, age-related physical changes and subconscious symptoms should be managed carefully. The frequency of depression in the elderly can reach 25%. The etiology of depression must be determined taking into account the biological, psychological and psychosocial factors of depression in the elderly. Genetic predisposition, female sex, the presence of additional medical diseases, the use of medications can be grouped under the heading of biological risks. Individual characteristics, cognitive status, history of psychiatric illnesses are examples of risk factors. Problematic life events, the loss of a loved one, grief, low socioeconomic status, being single, living alone can also be included under the heading of social reasons. Depression is part of the aging process and results in a poor quality of life and difficulties in social functioning (4).

Delirium and care

Delirium is defined as the sudden loss of attention and cognitive abilities. Delirium is a common condition in individuals with an illness requiring internal and surgical treatment. In the aetiology of delirium although there are physical causes, it occurs with psychological changes. The reason why delirium is more common in older people is health problems, multiple drug use, hospitalisation associated with longer residence times. Delirium can also be confused with common signs of dementia in the elderly. Both delirium and dementia in an elderly person can occur at the same time. There are three subtypes of delirium: hypoactive, hyperactive and mixed (karma). Because health problems are more common in the elderly than in the young, delirium or acute confusion can develop in the elderly in a matter of hours or days (4).

Dementia and care

Dementia affects more than 46 million people worldwide, and it is estimated that this figure will exceed 131 million by 2050. Dementia is a major public health problem for older people. Dementia is seen as an increase in the emotional outlook of the elderly on events, a susceptibility to behavioural problems and a progressive disease that weakens physical health. In other words, dementia; the impairment of memory, thinking, understanding and learning ability is a disease that affects many areas of cognitive functions. Increasing cognitive impairment in older people with dementia leads to severe disease progression and prolongs hospital stay. Ageing increases the risk of dementia. While the risk of dementia is 5% in individuals aged 65 years, this rate increases to 50% in individuals over 85 years. Studies have shown that the risk of delirium increases fivefold in individuals with dementia. Nutritional deficiency and fluid and electrolyte imbalance, disturbed sleep-wake balance, and forgetfulness are common in dementia patients (4).

Fear of death and care in old age

Fear of death is the feeling of destruction, exhaustion and helplessness in older people. The perception of death in older individuals is different from that of younger people. While death is an abstract concept for young individuals, it is a concrete concept that can be encountered at any time in older individuals. For this reason, the concept of death takes on a different meaning in older individuals and their emotional response is fear. As the companions of older individuals die, the individual begins to feel death closer to him/herself. If there is no belief in life after death in older individuals, the fear of death is felt more intensely. The fear of death is milder in older individuals who live in extended families, spend a lot of time with their relatives, pursue their own hobbies and do not have the opportunity to think about death. Elderly individuals, who do not think of death as annihilation and see it as a normal part of life and as a natural consequence, do not feel the fear of death very much (4).

PHYSIOLOGICAL CHANGES DUE TO AGEING

In planning the care of the elderly, special and general health care needs should be determined by assessing the physiological, socio-economic and psychological aspects of the patient. In determining the care needs of the elderly, the existence of physiological changes caused by ageing should be taken into account. The assessment of an elderly person should include medical and health history, functional status of physiological systems, loss of function, level of ability to perform activities of daily living, physical condition, ability to move, cognitive and mental fitness, and social and psychological status.

Cardiovascular system and care

Diseases of the cardiovascular system in the elderly are the most common cause of death in the world and in Turkey. Studies have reported that the frequency of hypertension in the elderly varies by 50-60%. Structural and functional changes of the heart and physical inactivity are the main risk factors for heart failure due to ageing. In old age, cardiac output decreases due to reasons such as impaired flexibility of the heart, cardiac cell growth, enlargement of the heart muscle and stenosis of the atrial and mitral valves. This situation impairs the elderly person's exercise tolerance and postural hypotension may develop. Atherosclerosis is stenosis in the inner layers of the arteries caused by a combination of fat, cholesterol and inflammatory debris associated with deterioration of vascular structure.

As a consequence of atherosclerosis, the risk of stroke and disease of the vessels feeding the heart tissue (coronary artery) is increased in older people. $\frac{3}{4}$ of deaths due to disease in the vessels feeding the heart tissue are seen in individuals over the age of 65 years (5). As structural changes occur in the heart of older people, the heart works harder and becomes fatigued to maintain normal cardiac function. The assessment of older individuals in terms of diseases of the cardiovascular system should be documented with objective tests and monitoring. Cardiovascular tolerance can be regulated by performing exercise appropriate for elderly individuals. Regular exercise for the elderly can eliminate negative effects on the cardiovascular system. The elderly should be protected from situations that lead to increased heart rate, excessive stress and fatigue, and prolonged inactivity. To increase their adaptation to this situation, older people should be informed in a way that they can understand. The elderly should be informed that, in addition to fluid losses, excessive fluid intake will overload the heart in the elderly (6).

Respiratory system and care

With advancing age, lung flexibility deteriorates, chest wall stiffness increases and respiratory muscles weaken. These structural changes in the respiratory system of older people reduce lung function. These changes include the maximum amount of air that will enter the individual's lungs when taking a deep breath (vital capacity), the exchange of oxygen and carbon dioxide (diffusing capacity), the amount of air that reaches the lungs with each breath (ventilation) and significant progressive decreases in the sensitivity of the respiratory system. The rate of these changes increases in older individuals who smoke. In addition, the frequency of chronic obstructive pulmonary disease (COPD) increases as a function of this situation.

In a recent study, the prevalence (frequency) of COPD was reported to be 16% in non-smokers, 29% in individuals aged 50-74 years who smoked and 37% in those over 75 years (7). Respiratory tract infections, especially pneumonia, are a major cause of death in people over 65 years of age in both developed and developing countries. Pneumonias (inflamed accumulation of water in the air sacs of the lungs) are important because of their high risk of death, as well as their difficult and costly treatment. With advancing age, the risk of aspiration pneumonia increases due to decreased ciliary activity in the lungs, decreased coughing and a weakening of the body's immune system. Susceptibility to respiratory tract infections may increase with age due to decreased immune response to antigens such as influenza virus and streptococcus pneumoniae.

For this reason, it is very important to vaccinate the elderly, especially against these antigens. Tuberculosis is also among the most common life-threatening diseases among the elderly (8). In the care of the elderly, respiratory rate, rhythm and depth should be monitored and appropriate breathing exercises should be performed. The effect of smoking on respiratory tract infections should be explained to the elderly and they should be encouraged to stop smoking. Especially for bedridden elderly, deep breathing and coughing exercises should be performed at least two hours apart. It should be noted that frequent changes of position in bedridden persons may prevent the development of lung problems and pneumonia (9).

Musculoskeletal system and care

With advancing age, bone density decreases, bones become weaker and more fragile, and the body's normal posture deteriorates. Bone loss is accelerated in women due to the menopause. The most important reason for this situation is the decrease in calcium absorption due to the decrease in serum vitamin D. Due to the decrease in the amount of growth hormone and testosterone with ageing, muscle wasting and atrophy occurs. Significant loss of bone and muscle tissue, shortening of stature, loss of teeth, bone fractures, stooping, leg curvatures and decreased muscle strength and coordination can occur. Due to the decrease in cartilage tissue in the joint, which extends as a thin line under the bones, the joint cannot move as easily as before and becomes prone to trauma. These repetitive traumas to the joint and cartilage tissue often lead to the acceleration of osteoarthritis in the elderly (10).

Older people should exercise and rest at a level that does not tire them on a daily basis. To enable older people to move around the house safely, arrangements should be made in and around the house, they should be encouraged to carry out their own daily activities and functions, and they should be encouraged to do appropriate physical exercise, walking, breathing exercises and postural exercises. Exercises appropriate to the abilities of older people should be part of their lives.

Nervous system and care

Increasing age slows down the number of brain cells and the rate of interaction. Sensory loss may occur due to a decrease in the number of cells in the spinal cord. Some mental functions such as vocabulary, short-term memory, learning, information storage, recall and word perception may decrease. Because of the differentiation in thought processes and emotional and perceptual changes, how long it takes to respond to stimuli and how the older person feels should be carefully examined. It should be recognised that they need more time to eat, bathe, dress and respond to questions, and family members should be informed of this. In addition, attention should be paid to memory impairment, changes in sleep habits, hypothermia and problems (11).

Digestive system and care

The amount of mucus in the digestive tract due to ageing and changes can be observed in decreased absorption, decreased contraction of the oesophageal muscles, deterioration of the elastic structure of the stomach, increased gastro-oesophageal reflux, decreased lactase, slowing of bowel movements, decreased blood flow and decreased efficiency of some enzymes. Although the WHO recommends that the elderly consume an adequate amount of protein daily, lipid and carbohydrate intake may need to be limited in the presence of cardiovascular diseases of old age and diabetes (12). Due to some changes in the digestive system of elderly individuals; problems such as decreased appetite, indigestion, diarrhoea, constipation, extreme weakness (cachexia), obesity may be observed. In elderly individuals with decreased appetite, nutritional problems may occur if problems related to the use of dentures are added. Inadequate dentures cause sores in the mouth. These sores lead to avoidance of foods that are difficult to eat but necessary for health. To solve problems of the digestive system in the elderly, in collaboration with the family; eating habits should be learned, preparing foods that they like, eating foods that contain sufficient fibre, vitamins and minerals. Constipation should be ensured and the consumption of foods that prevent constipation should be encouraged. The appearance of nutrients should be made appetising and they should be served frequently and in small portions. Faecal incontinence may occur due to impaired anal sphincter control. Taste disorders may lead to excessive intake of salt and sugar. Missing, broken or decayed teeth, which are common in an older person, lead to deterioration in the health of organs such as the heart and kidneys, as well as impaired oral health and nutrition. The important causes contributing to the deterioration of oral health make it mandatory to implement measures and care aimed at protecting oral health. To ensure the oral hygiene of the elderly, thick-handled toothbrushes and dentures with brush, cleaning tablet or cleaning solution should be provided. Older people and their families should be informed about denture cleaning and dental check-ups (13).

Elimination and maintenance

With age, tissue shrinks, blood flow to the kidneys decreases, filtration rate in the glomeruli decreases, secretion and absorption properties decrease, and a progressive loss of nephrons is observed. Impaired fluid and electrolyte (mineral) balance is observed due to impaired ability of the kidneys to filter urine, retain sodium and sense thirst. Bladder volume decreases, bladder muscle contractions last longer; a sensation of spontaneous urination is created, nocturnal urinary incontinence may be observed, as well as weakening of the bladder muscles, increased frequency of urinary tract infections as the bladder does not empty completely. The incidence of asymptomatic bacteria increases by 1% every ten years, where urinary tract infections increase with age, and the annual frequency can reach 7-8% in those aged 70-80 years (14).

In women, contraction of the urethra after menopause and increased thickness of its internal surface, impaired tone of the urethral sphincter and weakening of the abdominal structure due to frequent and multiple pregnancies are among the causes of urinary incontinence (15).

In men, due to enlargement of the prostate gland, difficulty in initiating urination, increased urge to urinate, frequent urination, especially at night, delayed emptying of the bladder, sensation of urine in the bladder, dribbling after urination, increased frequency of urinary tract infections, bladder stones (16).

Bowel movements with increasing age; slows down due to chronic diseases or consumption of multiple drugs. Elimination such as decreased fluid intake, decreased physical activity, changes in eating habits, constipation and diarrhoea due to nutritional deficiencies disorders can be seen. Elderly people who present with urinary incontinence should be encouraged to empty their bladder every 2 hours, regulate fluid intake and teach exercises to strengthen the perineal muscles (kegel). Measures should be taken to increase the intake of watery and pulpy foods to avoid constipation and to acquire regular daily toilet habits. If necessary, laxative drugs can be used on the recommendation of the doctor. The older person should be educated and counselled about faecal incontinence, regular toileting habits, muscle-strengthening exercises, lifestyle and meeting hygienic needs.

Immune system and care

With advancing age, susceptibility to infections increases due to decreased immune system functions and infections become much more severe. In older people, the reaction of immune cells to bacteria and other foreign substances is delayed. Pneumonia and influenza infections, bacterial build-up, inflammation of the inner lining of the heart (endocarditis), infectious diarrhoea, inflammation of the brain and spinal cord (meningitis), joint inflammations, fever of unknown origin, tuberculosis, autoimmune diseases increase in frequency and have a much more deadly course. The slowing down of immune system functions is a major cause of the increased incidence of cancer in the elderly. The known positive side of changes in the immune system is the decrease in the severity of allergic complaints in the elderly. It should be borne in mind that the elderly become more prone to immune system changes and infections, so care must be taken to comply with hygiene requirements and to administer the necessary vaccinations against diseases at the appropriate times, and relatives should also be concerned in this regard (17).

Skin and care

With increasing age, the skin becomes thinner and less elastic, dry, hard and wrinkled, in connection with the decrease in subcutaneous fatty tissue. The reduction of subcutaneous fatty tissue increases wrinkles and decreases tolerance to cold. Sensitivity decreases due to reduced nerve endings under the skin. Therefore, lesions increase and recovery is slower. The decrease in the number of melanocytes in the skin due to ageing makes the skin vulnerable to sunlight (18). Due to the changes in the skin of older people, it is important to take hygienic care of the skin. It is recommended to bathe 1-2 times a week using soaps and shampoos with appropriate pH that do not dry out the skin. The bath water should not be too hot. It is very important to dry the armpits, under the breasts and between the toes after bathing to prevent fungal skin infections. After bathing, the skin should be moistened with products such as petroleum jelly or Ionoline.

Special attention should be paid to foot care in the elderly with circulatory insufficiency and diabetes. Hot water should be used for foot care. Calluses should be softened in hot water, cleaned by rubbing with a pumice stone and petroleum jelly should be applied. Nails should be cut immediately after soaking in hot water. It is recommended that older people do not walk barefoot and wear cotton socks that are not too tight. It is recommended to wear slippers or house shoes that support the foot to avoid domestic accidents and falls.

Rest, sleep and care

The definition of sleep disorders in older people is complex. The causes of sleep disorders in older people are more related to physical causes than to anxiety and depression. While the rate of sleep disorders in society is estimated to be 10-12%, this rate has been reported to be 20-25% in the elderly (19). Sleep disorders lead to disability in the elderly. While night-time sleep time is shortened, daytime sleep time increases during the day. Sleeping less than 7 hours per night in the elderly leads to falls, walking difficulties and cognitive imbalances. The risk of death has been reported to be elevated in individuals with a sleep duration of more than 30 minutes. Long or short sleep duration in the elderly is associated with increased all-cause mortality. Prolonged sleep duration is associated with death from diseases of the cardiovascular system (20).

Excessive sleepiness can lead to increased accidents at work and at home, decreased daily performance and decreased social skills. Increased daytime sleepiness in older individuals is daytime sleepiness, sleep-related movement disorders and obstructive sleep apnoea syndrome (interrupted breathing during sleep). In older individuals, first of all, sleep-related complaints, their onset, their duration and their relation to accompanying factors must be defined. Providing sleep hygiene alone can increase the sleep quality of individuals with mild sleep problems. To increase the quality of sleep, it is important to ensure that the older person remains awake and standing for the entire duration of sleep. In necessary cases, pharmacological treatment can be applied, but great care must be taken with the use of drugs.

Vision and care

With age, the elderly lose lens flexibility and corneal sensitivity. Visual position and reaction to light should be assessed by sitting in front of the elderly person. The presence of sufficient light, the presence of diabetes and the presence of cataracts should be assessed. The drugs he/she uses should be checked and assessed to see if he/she is taking them correctly. To ensure safety in the environment, it is recommended to have a sufficient level of light, to have colored signs and to use glasses if necessary. Colored and illustrated medication boxes that indicate the time and characteristic of the medication can be used to take the medication correctly and ensure the safety of the medication. Although the use of glasses is very necessary for the elderly, they tend to lose them frequently. To prevent them from getting lost, a chain or cord that can be hung around the neck may be recommended. To improve the quality of vision, glasses should be cleaned by washing and drying them with a soft cloth (21).

Hearing and care

Over the years, the hearing ability of both ears deteriorates symmetrically. Especially in noisy environments, hearing loss becomes evident. Hearing difficulties may also be experienced in connection with an increase in cerumen. To facilitate hearing, you should speak in a voice that is not too loud. It should be determined whether or not you can read lips and, if necessary, communication should be facilitated by this method. Older people should be spoken to face to face in short, brief sentences. Shouting at the elderly person makes it difficult for them to hear, increases their anxiety and impedes communication. Elderly people who use hearing aids should remove them at night and wash them with soapy water (22).

Drug use in the elderly

The rate of drug use among the elderly is higher than that of the general population worldwide. Although the proportion of individuals over 60 years of age to the total population constitutes 1/5 of the total population in England, it has been reported that they consume 59% of the total prescribed drugs, and individuals over 70 years of age consume 5 or more drugs (23). In a systematic review, the drug consumption rates of the elderly in different provinces of Turkey were determined. The average number of drugs per person in the elderly was calculated to be 3.25. The drug consumption rate in the elderly was found to be higher than the average. The rate of drug use in women was found to be higher than that in men.

In addition, it has been reported that elderly patients are not adequately informed about their medications, their prescriptions are not written correctly, the rate of over-the-counter drug use in the elderly is high (14%), the rate of inappropriate drug use (9.8%), and one third of them experience drug-related side effects (24).

REFERENCES

1. <https://www.who.int/health-topics/ageing#tab=tab>.
2. <https://data.tuik.gov.tr/Bulten/Index?p=Istatistiklerle-Yasliilar-2021-45636>.
3. Öz F. Yaşamın son evresi: yaşlılık psikososyal açıdan gözden geçirme. *Kriz Dergisi* 2002;10(2):17-28.
4. Agar A. Yaşlılarda Ortaya Çıkan Psikolojik Değişiklikler *Journal of geriatric science* 2020;3(2):75-80).
5. Dalen JE, Alpert JS, Goldberg RJ, Weinstein RS. The epidemic of the 20(th) century: coronary heart disease. *Am J Med.* 2014 Sep;127(9):807-12.
6. Kane AE, Howlett SE. Differences in Cardiovascular Aging in Men and Women. *Adv Exp Med Biol.* 2018; 1065:389-411.
7. Kotaki K, Ikeda H, Fukuda T, Yuhei K, Yuki F, Kawasaki M, Wakamatsu K, Sugahara K. Trends in the prevalence of COPD in elderly individuals in an air-polluted city in Japan: a cross-sectional study. *Int J Chron Obstruct Pulmon Dis.* 2019 Apr 3; 14:791-798.
8. Osman M, van Schalkwyk C, Naidoo P, Seddon JA, Dunbar R, Dlamini SS, Welte A, Hesselting AC, Claassens MM. Mortality during tuberculosis treatment in South Africa using an 8-year analysis of the national tuberculosis treatment register. *Sci Rep.* 2021 Aug 5;11(1):15894.
9. Horiuchi A, Nakayama Y, Sakai R, Suzuki M, Kajiyama M, Tanaka N. Elemental diets may reduce the risk of aspiration pneumonia in bedridden gastrostomy-fed patients. *Am J Gastroenterol.* 2013 May;108(5):804-10.
10. Sun X, Zhen X, Hu X, Li Y, Gu S, Gu Y, Dong H. Osteoarthritis in the Middle-Aged and Elderly in China: Prevalence and Influencing Factors. *Int J Environ Res Public Health.* 2019 Nov 26;16(23):4701.
11. Seraji-Bzorgzad N, Paulson H, Heidebrink J. Neurologic examination in the elderly. *Handb Clin Neurol.* 2019; 167:73-88.
12. <https://apps.who.int/nutrition/topics/ageing/en/index1.html>.
13. Ástvaldsdóttir Á, Boström AM, Davidson T, Gabre P, Gahnberg L, Sandborgh Englund G, Skott P, Ståhlacke K, Tranaeus S, Wilhelmsson H, Wårdh I, Östlund P, Nilsson M. Oral health and dental care of older persons-A systematic map of systematic reviews. *Gerodontology.* 2018 Dec;35(4):290-304.

14. Mody L, Juthani-Mehta M. Urinary tract infections in older women: a clinical review. *JAMA*. 2014 Feb 26;311(8):844-54.
15. Parker WP, Griebing TL. Nonsurgical Treatment of Urinary Incontinence in Elderly Women. *Clin Geriatr Med*. 2015 Nov;31(4):471-85.
16. Mobley D, Feibus A, Baum N. Benign prostatic hyperplasia and urinary symptoms: Evaluation and treatment *Postgrad Med*. 2015 Apr;127(3):301-7.
17. Fuentes E, Fuentes M, Alarcón M, Palomo I. Immune System Dysfunction in the Elderly. *An Acad Bras Cienc*. 2017 Jan-Mar;89(1):285-299.
18. Bonté F, Girard D, Archambault JC, Desmoulière A. Skin Changes During Ageing. *Subcell Biochem* 2019; 91:249-280.
19. Gulia KK, Kumar VM. Sleep disorders in the elderly: a growing challenge. *Psychogeriatrics*. 2018 May;18(3):155-165.
20. da Silva AA, de Mello RG, Schaan CW, Fuchs FD, Redline S, Fuchs SC. Sleep duration and mortality in the elderly: a systematic review with meta-analysis. *BMJ Open*. 2016 Feb 17;6(2): e008119.
21. Chen Y, Hahn P, Sloan FA. Changes in Visual Function in the Elderly Population in the United States: 1995-2010. *Ophthalmic Epidemiol*. 2016 Jun;23(3):137-44.
22. Patel R, McKinnon BJ. Hearing Loss in the Elderly. *Clin Geriatr Med*. 2018 May;34(2):163-174.
23. Milton M, Hill-Smithe I, Jackson SHD. Prescribing for older people. *Bri Med J* 2008; 336: 606-609.
24. Akıcı A. Akılcı İlaç Kullanımı İlkeleri Doğrultusunda Yaşlılarda Reçete Yazma ve Türkiye’de Yaşlılarda İlaç Kullanımının Boyutları. *Türk Geriatri Dergisi* 2006; Özel Sayı: 19-27

9. OPINIONS AND RECOMMENDATIONS ABOUT PHYSIOTHERAPY FOR THE ELDERLY

Prepared between the dates 19 FEBRUARY 2023 - 30 APRIL
2023

Name and surname: ALİ OSMAN ÇINAR

PROFESSION: PHYSIOTHERAPIST

E-Mail : aliosman.c95@gmail.com

Studies: Kütahya University of Health Sciences - Physiotherapy
and Rehabilitation (Bachelor's Degree)

Kahramanmaraş Sütçü İmam University- Perfusion Techniques
(Master)

Trainings : I. Turkish Cypriot National Congress of
Physiotherapy and Rehabilitation (20 formaci6n16).

Physiotherapy career meeting (2016).

Physiotherapy and rehabilitation in men's health (IAOPH)
(2019)

Cupping and hydrotherapy therapy (2019)

The most common health problems in geriatrics and prevention - Rehabilitation Exercises

The World Health Organization defines biological aging as "a condition in which the gradual accumulation of molecular and cellular damage results in a decline in physiological reserve capacity and overall individual capacity, leading to many diseases and an increased risk of death". In general, the cut-off age is 65 years (1).

When the elderly person is mentioned; In World Health Organization (WHO) documents, individuals aged 65 years or older are mainly considered (2) and in United Nations (UN) documents, individuals aged 60 years or older are considered (3). These definitions mainly distinguish older individuals from other age groups in terms of chronological and physiological aspects. In addition to these definitions, old age is also defined in sociological, economic, etc. terms.

The proportion of elderly people in the total population is increasing in Turkey. According to data from the Turkish Statistical Institute (TÜİK), 8 million 245 thousand 124 elderly people were living in Turkey as of December 31, 2022 (4). Table 1 shows the evolution over the years. In December 2021, the percentage of population aged 65 years and over in the total population was 9.7% (4). It is known that the percentage was 3.4% in 1945 (4).

Yıl	Female	Male	Total
1945	4,0	3,1	3,5
1955	4,2	2,6	3,4
1965	4,6	3,3	4,0
1975	5,1	4,1	4,6
1985	4,7	3,7	4,2
1990	4,8	3,8	4,3
2000	7,6	5,8	6,7
2010	8,2	6,3	7,2
2015	9,3	7,2	8,2
2021	10,9	8,6	9,7

Tablo 1. Change in the percentage of the elderly population in the total population for the selected decade. (1945-2021) (4, 5)

According to TUIK, some of the statistics that stand out for their gender specificity in 2021 are: (4):

- According to the assessment conducted for the 60 and over age group in Turkey; The proportion of female population in the total population is 52.3% in the 60-74 age group and 73.2% in the 90 and over age group.(6).
- Older men outnumber older women in all levels of completed education.
- The labor force participation rate is 16.8% for men and 4.6% for women. The overall participation rate is 10%.
- Older men use the Internet more frequently than older women (40.0% and 25.9%).
- The life satisfaction index is 56.2% among all seniors. 51.2% of men and 60.1% of women say they are satisfied with their life. "Family" is the most cited source of happiness.

REFERENCES:

1. Türkiye Yaşlı Sağlığı Raporu: Güncel Durum, Sorunlar ve Kısa-Orta Vadeli Çözümler. Karan MA, Satman İ (Editörler). Türkiye Sağlık Enstitüleri Başkanlığı Türkiye Halk Sağlığı ve Kronik Hastalıklar Enstitüsü Yayın No: 48569, İstanbul 2021.
2. WHO, Western Pacific Ageing and health
<https://www.who.int/westernpacific/health-topics/ageing>.
3. UN, International Day of Older Persons 1 October
<https://www.un.org/en/observances/older-persons-day>
4. TÜİK, İstatistiklerle Yaşlılar, 2021
<https://data.tuik.gov.tr/Bulten/Index?p=Istatistiklerle-Yasli-lar-2021-45636>.
- 5.https://www.aile.gov.tr/media/115108/eyhgm_istatistik_bulten_i_temmuz2022.pdf pp 73 92
6. TÜİK, İstatistiklerle Kadın, 2021
<https://data.tuik.gov.tr/Bulten/Index?p=Istatistiklerle-Kadin-2021-45635>

Health problems in old age

Older people can become ill very frequently and suffer from many problems of chronic discomfort. These chronic diseases are non-infectious diseases that progress slowly and steadily, are not fully cured, cause disability, and create personal and economic problems (1). Among the most common chronic diseases worldwide are heart disease, hypertension, stroke, asthma, chronic bronchitis, emphysema, cancer, diabetes mellitus, and arthritis (2). Chronic diseases affect 70-90% of the elderly in Turkey. The occurrence of chronic diseases in the elderly implies the occurrence of care needs (3). Studies have shown that 90% of elderly people living in our country suffer from one chronic disease, 35% from two, 23% from three and 15% from 4 or more chronic diseases. It has been determined that these chronic diseases are mostly related to vision, hearing and orthopedics. Most of the diseases seen in the elderly can be prevented by early diagnosis, so the role of preventive health services is important (4).

According to the results of the Turkish Health Investigation, the obesity rate in the population over 65 years of age was 22.9% in 2010 and 29.0% in 2019, when looking at the Body Mass Index calculated from the height and weight values. Looking at the obesity rate in the elderly population by gender, it was found that in 2019, the rate was 19.9% for elderly men and 36.2% for elderly women.(5). If these ratios are taken into account, a decrease in mobility and exercise tolerance is observed in individuals with aging. In this case, the factors causing health problems in older individuals or an increase in symptoms in health problems are as follows: increased body mass indexes, sleep problems, falls. Deterioration in the quality of nighttime sleep in the elderly can cause a number of problems during the day. These are: excessive daytime sleepiness, fatigue, risk of accidents and falls, decreased performance in attention, concentration and cognitive functions (6). Falls are a serious medical problem and a major public health problem in the elderly.

In the elderly, mortality and disability due to falls are quite high. With old age come vision and hearing problems, balance and coordination problems, and falls due to loss of strength. It is very important to determine the problems that cause falls, eliminate these problems, provide rehabilitation and organize order in the home of the elderly (1). According to 2016 data, the most common diseases among the elderly in Turkey are mainly:

1. High blood pressure
2. Lumbar legion problems
3. Problems in the neck region
4. Arthrosis
5. Rheumatoid arthritis
6. Ankylosing spondylitis
7. Fracture (fall)
8. Diabetes
9. Heart failure
10. Arteriosclerosis (stiffness of vessels)
11. Asthma
12. COPD
13. Osteoporosis
14. Urinary incontinence (bladder problems)
15. Prostate cancer
16. Chronic renal insufficiency
17. Depression
18. Myocardial infarction (heart attack)
19. Alzheimer's disease
20. Obesity
21. Stroke
22. Parkinson's disease
23. Multiple sclerosis
24. Vision problems vb.

In the prevention of these diseases and symptoms observed in individuals over 65 years, it is recommended that it be done under the control of a physician with a multidisciplinary approach such as physiotherapy and rehabilitation in slowing the progress or in the rehabilitation process.

The information shared is for informational purposes and the exercises should be adapted to the individual and should be done under the supervision of a physician and accompanied by a physical therapist. The suggested exercises are shared as general information and as examples.

REFERENCES:

1. Dağ E. Halk Sağlığı Bakış Açısıyla Yaşlılık, Yaşlılık Sorunları Ve Sendromları Tam Metin Kitabı. III. International Health Science And Life Congress, 04-06 June 2020 Burdur/TURKEY.

(Dağ E. Aging, Aging Problems and Syndromes Full Text Book from a Public Health Perspective. . III. International Health Science And Life Congress, 04-06 June 2020 Burdur/TURKEY.)

2. Aslan D, Koç E, Çolaklar M. Yaşlıların Sağlık/Hastalık Durumlarının Toplum Sağlığı Açısından Değerlendirilmesi. Sosyoloji Araştırmaları Dergisi, 2018; 21(2): 29-48.

(Evaluation of the Health/Disease Conditions of the Elderly in Terms of Community Health)

3. Özkul M, Kalaycı I, Aslan A. Yaşlılık ve Kadın Sorunlarını Toplumsal Sermaye Perspektifinden Düşünmek. Süleyman Demirel Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 2017, 27: 366-386.

(Thinking of Aging and Women's Issues from the Perspective of Social Capital.)

4. Bilir N. Değişen Sağlık Örüntülerinde Halk Sağlığı Çalışanlarının Rolü: Kronik Hastalıklar ve Yaşlılık Sorunları. Toplum Hekimliği Bülteni, 2006, 25.3: 1-6.

(The Role of Public Health Workers in Changing Health Patterns: Chronic Diseases and Aging Problems.)

5. Türkiye İstatistik Kurumu (TÜİK). İstatistiklerle Yaşlılar (2020). Erişim Adresi:TÜİK Kurumsal (tuik.gov.tr) Erişim Tarihi (18.09.2022).

(seniors with statistics)

6. Girgin N. Huzurevinde Kalan Yaşlılarda Nikotin Kullanımının Uyku Kalitesine Etkisi. İstanbul Gelişim Üniversitesi Lisansüstü Eğitim Enstitüsü Psikoloji Anabilim Dalı Klinik Psikoloji Bilim Dalı Yüksek Lisans Tezi İstanbul 2020.

(The Effect of Nicotine Use on Sleep Quality in Elderly Residents.)

SAFETY PRECAUTIONS TO BE TAKEN WHEN STARTING TO EXERCISE

- Middle-aged seniors should have a medical checkup before beginning an intense exercise program. Regardless of the state of their physical capacity, most older people have no problem increasing their level of physical activity to a moderate level.
- However, those with chronic diseases such as heart disease, hypertension, diabetes or those who smoke should definitely undergo a medical check-up before starting to exercise.

GENERAL SAFETY PRECAUTIONS

- If you have led a sedentary life for a long time, if you feel weak and helpless, you should start exercising slowly. You should gradually increase the duration and intensity of exercise.
- During exercise, you should wear comfortable clothing suitable for the season, which does not cause excessive sweating or restrict your movements, and shoes with orthopedic soles that support your feet.
- You should not hold your breath while exercising; you should continue to breathe comfortably and regularly.
- Physical activity increases the body's need for water. Especially in hot weather, care must be taken not to dehydrate the body. Therefore, from the moment you decide to increase physical activity, you should start drinking water without being thirsty.

PROBLEMS TO BE AWARE OF DURING EXERCISE

- If you feel pain in the chest area
 - If you experience palpitations or irregular heartbeats
 - If you feel short of breath
 - If you experience staggering (dizziness and fainting)
 - If you experience nausea and vomiting
 - If you lose weight markedly and out of your control.
- You should stop exercising and consult a doctor.

WHAT EXERCISES SHOULD BE DONE, HOW OFTEN AND AT WHAT INTENSITY?

- Exercise programs usually consist of three parts: warm-up, work and cool-down.
- The purpose of the warm-up is to prepare the body for the work to be performed. Movements should be rhythmic and natural, moving smoothly from one movement to the next. An ideal warm-up period should last about 20 minutes.
- The purpose of the cool-down is to return the body to its pre-exercise state. Ideally, this period should last about 10 minutes and the heart rate should drop to 110-120 per minute.

For a healthier life, there are 4 types of exercise that you should do consistently and regularly.

1. Aerobic (durability)
2. Strengthening
3. Flexibility
4. Balance exercises

EJERCICIOS AERÓBICOS

- These are movements that require large muscle groups to work rhythmically for a certain period of time.

Type of exercise:

- Although the most recommended aerobic exercise in the elderly is walking, swimming, cycling, forest bathing, jogging, hiking, swimming and cycling may be preferable for those who have difficulty performing movements that place a load on the joints due to musculoskeletal diseases.

Frequency and duration of exercise;

- For a healthy lifestyle, 5 days a week, 30-60 minutes of moderate- or vigorous-intensity exercise.

- High-intensity aerobic exercise for at least 20-30 minutes, 3 days a week is recommended.

- Combining moderate and high intensity activities, exercises can be performed 3-5 days a week.

- The degree of perceived exertion is scored between 0 and 10.

- In moderate-intensity exercises, the level of exertion is 5-6 and there is a noticeable increase in heart rate and respiration.

- At high intensity exercise, the level of perceived exertion is 7-8 and there is a significant increase in heart rate and respiration.

- The duration of exercise should be increased gradually and walking for 20-30 minutes at least 3 times per week.

- If you feel weak, start with 5-minute walks a day and increase the time by 5 minutes as you feel stronger.

- This activity causes an increase in breathing and heart rate, but it would be wise to adjust the walking speed to a pace where you are "not out of breath, able to talk to the person next to you".

FLEXIBILITY EXERCISES

- Flexibility exercises should be performed at least 2 days a week, for at least 10 minutes each time.
- For each exercise, 3 to 5 stretching repetitions of 30 to 60 seconds duration are necessary.
- Stretching exercises can be performed during the warm-up and cool-down periods of aerobic and strengthening exercises.
- Avoiding quick stretches and performing exercises slowly are best practices. A slight pulling sensation is normal, but should not cause pain.

BALANCE EXERCISES

- Balance activities (Tai Chi - Otago Exercises - Tango - Tandem Exercises, etc.) are recommended for people at high risk for falls, as falls and related injuries become more frequent as people age.
- It is helpful to hold on to a solid place at first; as the older person becomes stronger, the amount of holding is reduced. These exercises may require supervision.
- Balance exercises performed 2-3 times per week reduce the frequency of falls.
 - *Gradual reduction of the support area (e.g., standing, tandem stance, standing on one leg).
 - *Dynamic movements to change the center of gravity (e.g., tandem walking, circular rotation).
 - *Strengthening of postural muscles (e.g., standing on heel or toes)
 - *Strengthening of postural muscles (e.g., standing on heel or toes)
 - *Reduction of sensory stimuli (e.g., standing with eyes closed).

STRENGTHENING EXERCISES

- To maintain their physical independence, it is recommended that older people perform resistance exercises to increase muscle strength at least 2 days a week.
- A total of 8-10 exercises using large muscle groups should be performed.
- Use sufficient resistance to perform 10-15 repetitions of each exercise (weight, elastic band, sandbag).
- The same muscle groups should not be exercised two days in a row.

Most frequent disorders in people over 65 years of age and recommendations

1- Hypertension

Hypertension is present when the pressure exerted by the blood transported from the heart to the body is above normal values. An adult over 18 years of age should have a resting blood pressure of 120/80 mmHg. Symptoms of hypertension include frequent urination, leg edema, blurred or double vision, nosebleeds and arrhythmias. Hypertension, which reduces life expectancy and quality of life, can lead to diseases such as stroke, myocardial infarction and kidney failure.

Factors that increase the risk of hypertension

Genetic predisposition, sedentary lifestyle, obesity, diabetes, tobacco and alcohol consumption, excessive salt intake and stress are the main factors.

Lifestyle changes, regular exercise, weight control and salt intake regulation are very important during the treatment of hypertension. Early diagnosis is very important to prevent serious diseases caused by hypertension, such as stroke, myocardial infarction and renal failure. Hypertension diagnosed and controlled on time does not affect quality of life.

Typical recommended exercises;

- 1- Moderate intensity dynamic aerobic exercise (walking, cycling, swimming).
- 2- Stationary cycling
- 3- Sitting on a chair with resistance equipment
- 4- Stair climbing with resistance equipment
- 5- Warrior's Pose (yoga)

2. Lumbar problems

A person may experience low back pain for three reasons. These are: pain in the lumbosacral region, radicular pain and referred pain. Pain in the lumbosacral region refers to pain felt in the region between L1-L5, in the sacral region and in the S1 and sacrococcygeal region. Radicular leg pain reflects dermatomatous pain radiating to the entire extremity due to dorsal nerve or nerve root irritation. Referred pain is pain felt in a non-dermatomal region away from the source of pain. Even in a painful condition, it is important to minimize bed rest and keep the patient active within the possibilities available. At the same time, psychosocial and emotional factors are important in the experience of pain. The fundamental component of treatment is assessment. When evaluating a patient with low back symptoms, it is not always possible to identify a definitive cause, as approximately 85% of patients are diagnosed with non-specific low back pain on initial evaluation. It is important to ask about the duration of the patient's pain, its location and the factors that increase or decrease the pain. It is important to ask what the pain sensation is like in order to better define and express it. For example, in the form of burning, electric shock. It is also important to question the severity of the pain, to evaluate it in terms of alarm signals and to assess it from a social and psychological point of view.

Treatment should be planned individually for each patient. Physiotherapy is important to control pain and increase functionality.

Typical exercises recommended:

- 1- Mobilization of the lumbar spine.
- 2- Gaining flexibility by pulling the knee towards the chest.
- 3- Bridge exercises
- 4- Exercises in crawling position
- 5- Straight leg raising

3. Neck problems

The 2010 Global Burden of Disease Study defines neck pain as "neck pain with or without pain referred to one or both upper extremities lasting at least one day." Neck pain ranks fourth in terms of disability among the 291 conditions examined in the 2010 Global Burden of Disease Study, and 21st overall in terms of YLD. Risk factors for neck pain are similar to those for other musculoskeletal conditions, including genetics, psychopathology (e.g., depression, anxiety, poor coping, somatization), sleep disturbances, smoking, and sedentary lifestyle. Risk factors unique to neck pain include a history of neck pain, trauma (e.g., traumatic brain and neck injuries), and some sports injuries. Although some studies have found a higher incidence of neck pain in some occupations, such as office and computer workers, manual laborers, and healthcare workers, the main workplace factors associated with this condition are low job satisfaction and job perception. As a physiotherapist, we have more than one method of application and, after a detailed assessment, customized applications of therapeutic exercises, manual therapy, patient education, electrotherapy, etc. are performed. Typical recommended exercises:

- 1- Cervical vertebrae mobilization exercises.
- 2- Shoulder extension with scapular retraction
- 3- Brugger exercise
- 4- Chin retraction exercise.
- 5- Neck exercises with resistance bands

4. Osteoarthritis

Osteoarthritis (OA), also known as degenerative joint disease, is usually the result of wear and tear and progressive loss of articular cartilage. It is more common in the elderly and can be divided into two types, primary and secondary:

Primary osteoarthritis: joint degeneration with no apparent underlying cause.

Secondary osteoarthritis: the result of an abnormal concentration of force throughout the joint, as in post-traumatic causes, or abnormal articular cartilage, as in rheumatoid arthritis (RA).

Osteoarthritis is usually a progressive disease.

The intensity of clinical symptoms may vary from person to person. However, over time they usually become more severe, more frequent and weaker. The rate of progression also varies from person to person.

The most common clinical symptoms are

Gradual knee pain that initially worsens with activity

Morning stiffness

Loss of range of motion

Pain on touch in the joint,

Stiffness and swelling of the knee

Pain after prolonged sitting or resting.

Osteoarthritis is the most common joint disease worldwide, and the knee is the most affected joint in the body. It mainly affects people over 45 years of age. Approximately 13% of women and 10% of men over 60 years of age have symptomatic osteoarthritis of the knee. Among those over 70 years of age, the prevalence rises to 40%.

The main conservative treatment of knee osteoarthritis is exercise physiotherapy. Patient education, exercise therapy, activity modification, weight loss, use of knee braces, etc. Typically recommended exercises:

- 1- Hamstring stretching exercise.
- 2- Stationary bicycle
- 3- Wall squat exercise
- 4- Strengthening of the quadriceps muscle, strengthening of knee extension
- 5- Strengthening of the hamstrings looking downward

5. Arthritis reumatoide

Rheumatoid arthritis is a chronic autoimmune inflammatory disease that typically presents as a symmetrical polyarthritis affecting the small proximal synovial joints. It occurs in 1% of the total population and its main symptoms are joint pain, stiffness and swelling, fatigue, and severely affects patients' quality of life. RA patients are also prone to develop systemic conditions such as cardiovascular disease.

Regular moderate- to high-intensity exercise has been shown to be effective in improving muscle strength and cardiovascular fitness in healthy populations and in patients with chronic diseases, including RA.

As in the general population, regular physical activity in patients with RA can provide general health benefits as well as disease-specific benefits, such as reduced pain, improved muscle function, and delayed onset of disability. Interestingly, moderate-intensity physical activity exerts anti-inflammatory effects in both healthy individuals and those affected by various chronic diseases.

Typical recommended exercises:

- 1- Squeezing and loosening a ball in the palm of the hand.
2. Compressing the knee by placing a towel under it.
- 3- Raising and lowering the arms above the head.
- 4- In lateral decubitus position, lift the foot to one side.
- 5- Elevation of the toes

6. Ankylosing spondylitis

Ankylosing spondylitis (AS) is an inflammatory disease that affects the axial skeleton and causes low back pain and functional impairment. The disease causes inflammation and pain in the spine and joints, which reduces physical activity and mobility of the spine and causes fatigue, stiffness, sleep disturbances and depression. Exercises are important to maintain or improve spinal mobility and fitness, as well as to reduce pain, and are included in evidence-based recommendations for the treatment of AS. Affected joints become increasingly stiff and tender due to bone formation at the level of the joint capsule and cartilage.

It causes reduced range of motion and, in its advanced stages, can give the spine a bamboo-like appearance, hence the alternative name "bamboo spine". Early diagnosis and treatment helps control pain and stiffness and can reduce or prevent major deformities. Physical therapy is an important part of the treatment of AS. It aims to relieve pain, increase mobility and functional capacity of the spine, reduce morning stiffness, correct postural disorders, increase mobility and improve the psychosocial status of patients. The main aspects of rehabilitation include education, a personalized exercise program and an outline of the physical activities to be performed. It is performed at home or in a group setting.

Typically recommended exercises:

- 1-Thoracic expansion exercises.
- 2-Neck exercises
- 3-Cat-camel stretching
- 4-Arm-shoulder exercise
- 5-Leg-hip exercise

7. Fractures (Falls)

Las caídas son un importante problema de salud pública en los países que envejecen, debido al aumento de las enfermedades crónicas, la dependencia funcional, el miedo a las caídas, la mala calidad de vida, la dependencia de otras personas y las muertes prematuras.

Las caídas son una de las principales causas de muerte por lesiones no intencionadas o accidentales en todo el mundo. Las caídas son uno de los problemas más críticos a los que se enfrentan a diario los ancianos, ya que uno de cada tres ancianos de 65 años o más, y la mitad de los de 85 años o más, se caen al menos una vez al año. Según las estadísticas de la Organización Mundial de la Salud, las caídas representan el 40% de todas las muertes accidentales.

Identified causes of falls: balance and gait disorders, polypharmacy, frailty, cognitive problems, vision problems and history of previous falls. Declining physical functions in older people due to age-related changes (loss of muscle strength, decreased flexibility and endurance) increase the risk of falls. According to a study in Türkiye, 48.7% of the elderly have fallen before, 53.9% have fallen more than once, 31.8% have fractures as a result of falls and 51.1% are afraid of falling. One in ten seniors who fall sustains a serious injury (hip fracture, subdural hematoma, severe soft tissue injuries, head trauma, etc.), requiring hospitalization. Typical recommended exercises:

1. assisted-unassisted tandem stance.
2. Assisted-unassisted single-leg stance. 3.
3. Assisted-unassisted squat
4. Assisted-assisted-unassisted reverse gait
5. Sitting and standing assisted-unassisted-unassisted
6. Lateral gait
7. Assisted-unassisted tandem walking
8. Combined gait with rotations

8. Diabetes mellitus

Diabetes, which is at the forefront of age-related diseases, is a very common type of disease worldwide and plays the leading role in the formation of many fatal diseases. Fasting blood glucose levels in healthy people range between 70 and 100 mg/dl. If the blood sugar level rises above this range and remains elevated for a prolonged period of time, it usually indicates diabetes. Diabetics experience three distinct symptoms. These include eating more than usual and feeling full, frequent urination, dryness and sweetness in the mouth and the urge to drink a lot of water.

Diabetes is classified into two types: Type 1 diabetes and Type 2 diabetes. The factors that cause the disease differ depending on the type. While genetic factors play a role in the causes of Type 1 diabetes, viruses that damage the pancreas, which produces the hormone insulin involved in blood sugar regulation, and failures in the body's defence system are among the factors that cause the disease. In addition, the following are the causes of type 2 diabetes, which is the most common type of diabetes: obesity (excess weight), family history of diabetes, advanced age, sedentary lifestyle, stress, gestational diabetes during pregnancy and giving birth to a baby that weighs more than normal.

Diabetes treatment methods differ according to the type of disease. In type 1 diabetes, medical nutritional therapy should be meticulously applied along with insulin therapy, lifestyle changes and exercise. In individuals with type 2 diabetes, in addition to providing dietary treatment, the use of oral anti-diabetic drugs to increase cellular sensitivity to insulin hormone or directly increase insulin hormone secretion should be carried out through a multifaceted assessment along with nutritional therapy, lifestyle changes and exercise.

Physical training programmes have emerged as an effective therapeutic regimen for the management of diabetes mellitus. The development of aerobic and resistance exercise programmes that have been shown to reduce the incidence of type 2 diabetes is one of the primary effects. Secondary effects include the ability of aerobic and resistance training to help control diabetes. There is increasing evidence that the combination of aerobic and resistance training is more effective than either model alone.

Exercise is not advised for diabetics with complications such as retinopathy, kidney disease or diabetic foot disease. If you exercise when your blood sugar is below 100 mg/dl before you start, you risk hypoglycaemia. If you exercise when your blood sugar is above 240 mg/dl, your blood sugar will rise even higher.

Typical recommended exercises:

1. Take-off wall squat
2. Climbing up and down stairs
3. Throwing weighted balls overhead
4. Turkish get-up exercise
5. Rowing exercise

9. Heart failure

Heart failure is a syndrome of cardiac ventricular dysfunction in which the heart cannot pump enough to meet the body's blood flow needs. Heart failure is a major public health problem in countries around the world. Many conditions can cause HF, including systemic diseases, various heart conditions and some inherited defects. More than two-thirds of all HF cases can be attributed to ischaemic heart disease, COPD, hypertensive heart disease and rheumatic heart disease. There are many risk factors for heart failure, such as advanced age (65 years or older), male gender, family history of heart disease, or certain underlying conditions, particularly myocardial infarction, valvular heart failure (leakage) or stenosis.

Certain lifestyle factors also increase the risk of heart failure, such as tobacco and alcohol use, physical inactivity, and a diet that predisposes to high cholesterol and hypertension.

In addition to treating the underlying cause of heart failure, symptoms are controlled with diet and lifestyle changes, medical treatments, surgical interventions and exercise.

Patients are also advised to limit salt and fluid intake, avoid alcohol and nicotine, optimise their body weight and do as much aerobic exercise as possible. Physiotherapy is important in the management of heart failure. The cornerstone of physiotherapy treatment is cardiac rehabilitation. In patients undergoing cardiac surgery, physiotherapy can also aid postoperative recovery. Typically recommended exercises:

1. Diaphragmatic breathing exercises.
2. Rowing
3. Thoracic mobilisation and balancing
4. Lunge exercise
5. Elliptical cycling

10.Venous insufficiency (varicose veins)

Venous valves act as barriers that prevent the return of blood through the normal functioning of the body. As a result of the deterioration or closure of these valves, the return of blood to the heart is impaired and the resulting condition is known as venous insufficiency. A vein bulging in this direction is called a varicose vein. Venous insufficiency causes blood to flow through the veins in the opposite direction, not towards the heart. Because the valves cannot function in the varicose vein, blood escapes through the damaged venous valves and cannot reach the heart. The most common causes of venous insufficiency are:

- Cigarette consumption
- Ageing
- Presence of blood clots in the veins
- In cases of sedentary lifestyles, prolonged inactivity or standing, there is an increase in blood pressure in the legs and this leads to venous insufficiency.
- Obesity (an excessive physical structure causes the pressure on the valves of the leg veins to cause damage).
- Weakness of the muscular structure
- Deterioration of the inner wall of the blood vessels after superficial or deep vein occlusion.

Leg pain is the most common symptom of venous insufficiency. The throbbing pains in the legs are intense and severely affect daily life. Swelling in the legs and ankles occurs due to fluid accumulation in the lymph in the legs. This is a sign that oedema has started to form. This is followed by progressive phases of pain that can lead to ulcers in the ankles, feet or under the legs. In this regard, it is necessary to consult a doctor when persistent pain, numbness or persistent sores are observed in the legs. Treatment should be assessed with a multidimensional approach, the main source of the problem determined and treatment initiated. Necessary medical treatments may include nutritional regulation, lifestyle changes, exercise and wearable supportive clothing.

Typically recommended exercises:

1. Stretching exercises
2. standing calf raises
- Deep diaphragmatic breathing exercises
4. Squats
5. Flexion-extension, rotation and hip-knee strength exercises

11.Asthma

Asthma is a hypersensitivity of the airways to environmental influences. The airways and the mucous membranes lining them become inflamed. This inflammation can block airflow and cause shortness of breath. These periods are called asthma attacks. Asthma manifests as attacks caused by airway obstruction. Symptoms of asthma usually include: Coughing, shortness of breath wheezing tightness in the chest Characteristics of asthma symptoms that can help diagnose asthma are: Symptoms are recurrent, occur at night and in the morning, and are triggered by exposure to some allergens or after exercise. These symptoms do not occur between attacks, and asthmatics do well between attacks.

With ageing, there is a decrease in airway elasticity, an increase in chest wall stiffness due to stiffening of the costal components and costal cartilage, and at the same time a weakening of the diaphragm and a decrease in respiratory muscle strength. In addition, age-related changes occur in the lung parenchyma. With age, changes in innate and acquired immune responses occur. This leads to increased susceptibility to airway infections in the elderly and to both asthma attacks and late onset asthma.

Objective monitoring, avoidance of asthma triggers, pharmacotherapy and patient education as well as physiotherapy are essential for symptom relief. Protection from active and passive smoking is also very important. Decreased respiratory muscle strength in the elderly is closely related to malnutrition, decreased peripheral muscle strength and heart failure. Strengthening the limb musculature with exercise has been shown to prevent the reduction of respiratory muscle strength (5). Not only respiratory but also skeletal muscles influence respiratory muscle function.

A strong and independent relationship has been found between PIM and PEM values and peripheral muscle strength, such as hand grip, in the elderly (7). In their study, Bassey and Harries demonstrated a 2% annual decrease in hand grip strength in 620 healthy individuals over the age of 65 years (10). With age, mucociliary activity also decreases and excretion of bronchial secretions becomes insufficient. At the same time, decreased cough reflex leads to an increased risk of lung infection (13).

Typically recommended exercises:

1. Diaphragmatic breathing exercise and the ZET cycle.
2. Holding and squeezing a ball in the palm of the hand.
3. Strengthening of the back extensors.
4. Thoracic mobilisation
5. Peripheral body weight strength training

COPD

COPD is defined as a common, preventable and treatable disease characterised by persistent airflow limitation and respiratory symptoms due to airway and/or alveolar abnormalities, usually caused by severe exposure to noxious particles or gases. COPD is a multicomponent and variable disease. For this reason, it is often not possible to define COPD along precise lines, and it is not always successful to attempt to treat the disease with a standard approach, mostly formed by guidelines (4). COPD is usually asymptomatic at first, but as it progresses, the following symptoms appear;

- Difficulty breathing, especially when moving.
- wheezing sound when breathing
- Cough with phlegm
- Tightness in the chest
- Tiredness

The reduced exercise capacity, impaired body composition and quality of life associated with COPD require a holistic multidisciplinary approach. Pulmonary rehabilitation is the gold standard treatment for COPD patients. Pulmonary rehabilitation is a well-equipped programme that includes exercise training, health education and respiratory techniques for people exposed to lung disease due to COPD and its derivatives. Purpose of pulmonary rehabilitation; to reduce disease-related symptoms and complications, to enable the person to use their maximum capacity in activities of daily living, to increase the person's exercise tolerance, to provide self-confidence and independence, and to eliminate negativities such as depression and stress.

Typical recommended exercises:

1. Diaphragmatic breathing exercise - Forced expiratory cycle.
2. Knee extension and straight leg raise.
3. Catching and squeezing the ball in the palm of the hand.
4. Postural exercises
5. Shoulder-arm raising exercises

13. Osteoporosis (Bone Thinning)

Osteoporosis is a disease; over time, bones lose calcium and become hollow, weak and easily broken. The internal structure and quality of the bone deteriorates, the body's bony framework weakens. Osteoporotic bone is bone that has lost mass. People with osteoporosis either have less developed bone tissue earlier in life, or the loss of bone mass seen in later life is more rapid in these people compared to others. Many men and women over the age of 65 suffer fractures of the hip, spine, wrist and other bones worldwide. Untreated osteoporosis can lead to bone pain and deformities. In addition, the person gradually becomes more dependent on those around them and withdraws from a productive life. Their quality of life is diminished and they may experience psychological problems similar to depression.

Another characteristic of osteoporosis is that it is a disease that progresses silently and insidiously, as it does not cause pain unless a fracture occurs.

General risk factors for osteoporosis:

- Early menopause or surgical (artificial) menopause following surgical removal of the ovaries.
- With the decrease in testosterone, the male sex hormone, in men, bone mass may also decrease.
- Low calcium diet and vitamin D deficiency.
- Less physical activity, mobility and exercise (exercise has been shown to increase bone mass and strengthen bones).
- Smoking.
- Consuming too much alcohol and caffeinated beverages.

Replacing lost bone is a difficult, costly and time-consuming task, so it is easier to identify risk factors and prevent osteoporosis than to treat advanced osteoporosis.

In treatment;

1. Take steps to reduce falls through lifestyle changes,
2. Try to implement physician-recommended exercise programmes,
3. Organising your diet as recommended,
4. Using your medication regularly and going back for regular medical check-ups,
5. It is necessary to know that osteoporosis is a preventable and treatable disease.

Typical recommended exercises:

1. jumping rope
2. Climbing up and down stairs with weights
3. Leg press
4. Tiptoe step-up
5. Cobra Exercise

14. Urinary incontinence

Urinary incontinence (UI) is a common health problem in both men and women, and is more common in the geriatric population. UI usually consists of involuntary incontinence of urine and it has been suggested that it may be associated with other urinary, bowel or pelvic floor symptoms. UI can often be associated with non-genitourinary causes, including chronic conditions such as ageing of the lower urinary tract, urinary tract infections, diabetes mellitus, cognitive disorders, neurological conditions and obesity. These factors are among the temporary and reversible causes of UI when a geriatric patient presents with UI, and all of these factors should be considered and not overlooked.

Physiological changes that occur in the urinary system with ageing facilitate the development of UI. These changes:

- Tendency for urethral pressure to decrease,
- Oestrogen, which decreases with menopause in women, causes vaginal atrophy and a decrease in the supportive tissues around the urethra and weakening of the pelvic floor muscles,
- Presence of benign prostatic hypertrophy in men,
- Decreased ability to avoid urination,
- Decreased detrusor contractility
- Decreased total bladder capacity
- Detrusor overactivity
- Increased amount of postvoid residue
- Decreased renal concentrating capacity
- Alteration of the normal diurnal ADH rhythm

In the geriatric population, UI is a common and distressing symptom that significantly affects patients' quality of life. Treatment options include lifestyle changes, bladder training, pelvic floor muscle exercises, and medical and surgical treatments. Patients should be examined in all aspects, treatment should be evaluated in terms of benefits and harms, and treatment should be tailored to individual needs and conditions.

Typical recommended exercises:

1. Breathing exercises
2. Pelvic floor stretching exercises
3. Trunk control exercises
4. Bladder training
5. Transversus abdominis exercises

15. Prostate cancer

Nowadays, geriatric oncology cases are more frequent as a consequence of the gradual increase in life expectancy and the positive advances in cancer treatment in recent years. Studies have shown that all types of cancer are more frequent in the elderly population than in the younger population. Although cancer is a serious health problem at all ages, it is of greater importance in individuals over 65 years of age, especially with the physiological and pathological changes and comorbidities that come with ageing. When we look at the urological problems of the ageing man, prostate-related problems figure prominently. The underlying problem may be benign enlargement of the prostate gland, i.e. benign prostatic hyperplasia (BPH), and prostate cancer is one of the problems that increase in frequency with age and can cause the same discomfort. Prostate cancer is one of the most common cancers in men. With a high mortality and metastasis rate, microscopic changes in the prostate may progress slowly or cause no signs or symptoms.

Symptoms of prostate cancer:

- Urinary incontinence or other urinary discomfort.
- low back pain, inner thigh pain or perineal pain
- haematuria (blood in the urine)
- Blood in semen
- Sensation of pain/discomfort below the navel or pelvic area
- Sexual dysfunction

Definitive treatment of localised prostate cancer includes radiotherapy, radical prostatectomy and cryotherapy. Radiation therapy usually has far fewer side effects (about 50% fewer) than radical prostatectomy. Definitive treatment may have side effects such as erectile dysfunction and urinary incontinence. With conservative treatment, urinary control can be improved by increasing the strength, endurance and coordination of the pelvic floor muscles. Pelvic floor muscle training (with electrical stimulation) improves urinary incontinence after prostatectomy. The comorbidities present in most elderly people show the need and importance of a multidisciplinary approach to these individuals.

Typical recommended exercises:

1. Head and neck exercises
2. Upper limb exercises
3. Trunk control exercises
4. Exercises for the lower limbs
5. Diaphragmatic breathing exercise

16. Chronic renal insufficiency

With ageing, various anatomical and physiological changes occur in the kidney. These age-related changes in the kidney, which has a very important role in systemic haemodynamics, weaken the adaptive capacity of the kidney; many renal diseases, especially impaired fluid balance and the development of acute kidney injury, are more easily and frequently observed in older patients.

It is defined as the presence or persistence for at least 3 months of structural, imaging or laboratory findings indicative of renal damage, with or without a decrease in the physiological filtration rate of the kidney for at least 3 months. The risk of cardiovascular disease increases with age, taking into account comorbidities.

Chronic renal failure is accompanied by serious complications, so careful monitoring is necessary. To avoid the possible negative consequences of dialysis, secondary problems that arise afterwards can also be prevented. Exercises that can be recommended in general to prevent the problems that may arise as a consequence of chronic renal failure and to protect the health of the kidneys are the following:

1. increasing the strength of the respiratory muscles with Triflo.
2. Toe-lifting exercise.
3. Climbing up and down stairs
4. Cycling
5. Postural exercises

17. Depression

Depression is the most common mood disorder in older people. With ageing, brain volume decreases due to a decrease in cerebral blood flow, number of nerve cells and synapses. While the prevalence of depression is 5-8% in the population, it is between 15-20% in the population over 65 years of age. This rate is between 25-40% in elderly people living in nursing homes. Especially above 80 years of age, symptoms may be different. In elderly patients, somatic (physical) and cognitive symptoms are more prominent than emotional symptoms of depression. Elderly people who do not describe depression may talk about not being able to feel anything or losing interest and the ability to enjoy themselves. The fact that the elderly did not describe emotional symptoms led to the use of concepts such as "depression without sadness".

Unfortunately, treatments for such a common problem are not as advanced. Existing drugs have been developed in younger groups, the mechanisms of depressive processes in the ageing brain have not been adequately studied and are assumed to be the same as in the young. The elderly are much more sensitive to the side effects of drugs and the elderly respond later to these drugs. Considering the role of exercise in the general well-being of the organism and in physiological processes, exercises that can be recommended in general are:

1. Stretching exercises combined with breathing
2. Jumping on the trampoline
3. Strengthening exercises with resistance
4. Gardening
5. High-intensity aerobic exercise (running, swimming, etc.)

18. Myocardial infarction (heart attack)

Myocardial infarction (MI) is a serious disease that occurs as a result of decreased or interrupted blood flow to the coronary arteries. Necrosis of myocardial cells develops within 15 minutes after coronary occlusion.

According to the TEKHARF (Heart Disease and Risk Factors in Turkish Adults) study in Turkey, CAD is seen in 1/5 of people aged 60-69 years, and in one in four people aged 70 years and older. The most common cause of myocardial infarction is coronary artery occlusion due to atherosclerosis. Other reasons include coronary embolism, coronary artery anomalies, increased blood viscosity and excessive myocardial oxygen demand.

The most important reason is the formation of atherosclerosis and usually occurs as a result of many years under the influence of various factors. Risk factors that cause atherosclerosis are often: family history of CAD, age, gender or genetic predisposition, hypertension, smoking, low physical activity, obesity, stress and elevated serum lipid levels.

In some patients, it often manifests with atypical symptoms such as indigestion, fatigue, restlessness, dyspnoea, tachypnoea, burning, numbness and heaviness in the chest, arm and shoulder. Exercises that can be recommended in general to maintain heart and circulatory health at an optimal level and to gain resistance against disease:

1. Stretching exercises combined with breathing.
2. Moderate intensity resistance training
3. Riding an elliptical trainer
4. Gardening
5. Balancing exercises (tai chai, yoga, etc.)

19. Alzheimer's disease

Alzheimer's disease is a disease of the brain that causes progressive loss of all cognitive functions, mainly memory, and is characterised by microscopic deposition of abnormal proteins in the brain. Dementia means "progressive loss of memory, language, arithmetic, decision-making, attention and other cognitive functions". All Alzheimer's sufferers have dementia, but not all dementia sufferers have Alzheimer's disease. Because there are dozens of other diseases that cause dementia. Alzheimer's disease is the most common type of dementia. For this reason, the terms Alzheimer's disease and dementia are often and sometimes mistakenly used interchangeably.

It is estimated that the number of Alzheimer's sufferers is around 250,000 in our country, and this number is expected to increase with the increase in the elderly population. The incidence of Alzheimer's disease increases with advancing age, but it should be noted that Alzheimer's disease is not an inevitable result of normal ageing. In the normal ageing process, some structural changes occur in the brain, but there is no significant loss of cognitive/mental abilities. In Alzheimer's disease, there is a clear "difficulty in learning new information". Alzheimer's disease is not a mental illness, but psychiatric symptoms are added during the course of the disease, so it can be similar to a psychiatric patient.

The following disorders are observed in Alzheimer's disease;

1. Memory problems
2. Difficulty in thinking and reasoning
3. Difficulty in decision making,
4. Difficulty in finding words,
5. Difficulty in arithmetic operations,
6. Personality and behavioural changes,
7. Getting lost
8. Difficulty in performing functions that were once easy to do.

Alzheimer's disease should be considered as a multi-faceted and multi-interactive "Bio-Psycho-Social" event that causes great sadness and distress to the patient, his family, his caregiver and his whole social environment and its treatment and care should be managed by a "Multidisciplinary Team", with a multi-perspective approach in a broad sense. The first step in prevention strategies is to eliminate the risk factors mentioned above. Modifiable risk factors are recommended: low educational level, smoking, prevention of physical inactivity, prevention of depression, hypertension, diabetes and obesity. In the light of this information, the exercises that can be suggested in general to prevent Alzheimer's disease are as follows:

1. Aerobic exercise
2. Balance and co-ordination exercises (tandem walking, side-stepping)
3. Strengthening exercises
4. Stretching exercises
5. Breathing exercises

20. Obesity

Obesity is a growing epidemic in developed countries and has been an increasing problem in our elderly population. Obesity in older adults is accompanied by an undesirable burden of chronic diseases, metabolic complications and a worsening quality of life. More importantly, in older adults, obesity exacerbates age-related decline in physical function, leading to frailty and disability. Current treatment designed for weight loss in the elderly includes lifestyle intervention (diet, exercise and behavioural changes), pharmacotherapy and surgery. Current findings suggest that weight loss therapy prevents or delays functional decline and medical complications and improves quality of life in obese older adults. However, physicians prescribing weight loss treatments to older people should be aware of the adverse effects on the patient's muscle and bone mass.

The prevalence of medical conditions generally associated with obesity (such as hypertension, diabetes, dyslipidaemia and cardiovascular disease) increases with age.

Older people who are physically active and have a slim abdominal girth are less likely to develop insulin resistance and type 2 diabetes mellitus. With this; obese older adults have a higher prevalence of dyslipidaemia and hypertension. In general, obese people are said to have a lower health-related quality of life than non-obese people. However, compared to men, obese women have a lower quality of life.

Studies have shown that lifestyle changes, weight loss and physical activity reduce cardiovascular mortality and morbidity, whereas sedentary lifestyles and inactivity increase cardiovascular mortality and morbidity. The risk of cardiovascular disease has been found to be low in physically active people, regardless of the presence of cardiovascular risk factors. When physical activity is combined with diet, the positive effect of exercise on other cardiometabolic risk factors, such as lipid values, hypertension and diabetes, is synergistically increased.

Preventing obesity and controlling weight requires a multidisciplinary approach.

Typical recommended exercises:

1. Moderate-high intensity aerobic exercise.
2. Strength exercises
3. Flexibility exercises
4. Stretching exercises
5. Balance exercises

21. Stroke

Stroke (CVO) is recognised as the most common serious neurological disease. It is the third leading cause of death after heart disease and cancer, and the leading cause of morbidity. The incidence of the disease increases with age at the same rate. Ischaemic heart disease, hypertension, diabetes and cognitive impairment have negative effects on functional status. For this reason, it is very important to know the risk factors and the protection against them in geriatric patients. Especially in elderly patients, accompanying systemic factors, complications that may arise after stroke and lack of motivation of the patients may negatively affect the rehabilitation process. Therefore, preventing or minimising complications that may arise with the physiological process of aging is of great importance for the prognosis of rehabilitation.

Post-stroke complications in our patients were shoulder pain and subluxation in 49.0%, speech disorder in 29.8%, urinary dysfunction in 27.1%, complex regional pain syndrome in 18.5%, bowel dysfunction in 16.5%, DVT in 10.5%, dysphagia in 4.6%, pressure ulcer in 1.9% and depression in 5.9%. No pulmonary thromboembolism was observed during patient follow-up. Since more than one mechanism is affected in the treatment of the disease, multidisciplinary work is required in its management. Special training and exercise strategies are applied in stroke rehabilitation.

However, there are exercises that can be recommended in general for the protection and prevention of vascular health:

1. Moderate intensity resistance training
2. Riding an elliptical trainer
3. Balance exercises
4. Flexibility exercises
5. Aerobic exercises





@suareproject

suareproject@gmail.com

