



Summary Report

Research Activities on Loneliness in old age

by the Digi-Ageing consortium

Final version: July 2021



Intellectual Output - IO1-A9 - Sui	llectual Output - IO1-A9 - Summary Report on Research Activities in IO1	
Title:	Summary Report on Research Activities in IO1 by the Digi-Ageing consortium (edited by Hafelekar) Final version: July 2021	
Description:	In this report, we will summarise the results from the desk and field research of all partners to provide stakeholders with a quick overview of the situation in the participating countries. This report will be complemented by the Case Studies brochure to give voice to those people who care for older people in their daily work and who contribute their ideas or how to counteract the phenomenon of loneliness in old age.	
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DIGI-AGEING - overcoming loneliness

1 Introduction

"Loneliness in old age" is a well-known social phenomenon that still receives too little attention. However, the current pandemic clearly shows us that we need to pay more attention to the issue. Older people are increasingly isolated in this situation: Those in care facilities are secluded for their own protection, others have little contact with friends and family or live entirely on their own. People caring for older people are often overwhelmed by the many safety precautions and challenges in their own daily lives. This is also true for family caregivers.

Since October 2020, the international Digi-Ageing consortium has been working on a comprehensive concept that addresses these challenges and develops appropriate measures to counteract the phenomenon of "loneliness in old age". One of the main goals is to increase competences in the use of digital tools in the elderly care sector and to create a strong network that develops joint solutions.

1.1 Objectives of the project

- Map the situation of elderly loneliness in Europe.
- Raise awareness about the theme.
- Establish networks and policy recommendations to coping the problem.
- Develop digital tools to diagnose and prevent loneliness.
- Provide strategies for lonely individuals, caregivers, family, and friends on how to combat loneliness in later life.
- Create blended training programs on prevention of elderly loneliness.

1.2 Aim of this Summary Report on Research Activities in IO1

In this report we would like to summarise all the results the consortium has compiled on the topic of loneliness in old age via Desk Research and Field Research (Interviews), so that our stakeholders in particular and all those interested in the topic can quickly gain an overview of the situation in the individual participating countries.

In the chapter **Desk Research** you will find an introductory explanation of how this was conducted in the partner countries and an overview of the structure, which was agreed with all partners in advance so that we could arrive at comparable results.

The same applies to the **Field Research**: we created a comprehensive questionnaire for the three groups of interviewees and coordinated it in the partnership so that the results of the interviews were comparable, which allowed us to inform other IOs, e.g. see IO3 – **Loneliness diagnostic tools Specification report**, where Materia worked out a comparison of the results of all partner countries regarding how to identify if an aged person suffers from loneliness.

Brochure of Case Studies: In the national field research reports, two case studies per country were documented in order to let the carers speak for themselves. We have summarised these case studies in a brochure, which is attached to the Summary Report as Annex 1 and completes the field research.

Follow the further progress of our project through these channels:

- Digi-Ageing Website: www.digi-ageing.eu
- Digi-Ageing on Facebook: https://www.facebook.com/digiageing
- Digi-Ageing on LinkedIn: https://www.linkedin.com/company/digi-ageing
- Video on YouTube to explain aims of Digi-Ageing: https://youtu.be/lpesta-aaUE

2 Desk Research Design

A desk research has been carried out in each partner country to examine the phenomenon of "loneliness in old age" from different angles, to find a uniform perspective regarding the common goals of the project and to use terminology that is as consistent as possible (see Glossary). The results obtained in this way have later been verified and supplemented by a field research in all participating countries.

The structure for the Desk Research Reports was developed by Hafelekar and agreed with all partners. We present this structure here to make it easier to read the summary reports of the individual partners:

Part A) Loneliness in old age seen as asocial phenomenon

- Demographic data on ageing in your country
- Care structure for older people
- "Loneliness" and "Social Isolation" a demarcation
- Socio-political aspects and measures

Part B) Networks, Tools and Measures

- Existing Networks to prevent loneliness in old age [IO2]
- Initiatives, programs and projects
- Possible cooperation partners for the project
- Identification of "loneliness" measures & tools [IO3/IO4]
- Methods and Tools to identify and measure loneliness
- Methods and Tools on Preventing Loneliness
- Digital tools as a chance

Part C) Learning about "loneliness"

- Education, further training and awareness rising [IO5]
- Gerontological findings on the phenomenon of loneliness
- Current measures in education and further training programs to prevent loneliness
- Main learning gaps regarding "loneliness"
- How is the issue of loneliness considered in training in the health sector?
- Does the issue of help through digitization play a role in education and training?
- Recommendations for education and training

2.1 Main findings for Austria (by UMIT & Hafelekar)

Part A) Loneliness in old age seen as a social phenomenon

In old age, physical, mental and cognitive health interact closely with individual lifestyle, social relationships and financial situation. Almost half of the over-80s are affected by more or less pronounced frailty. About 10-15% of the over-80s suffer from loneliness or depression. Women and nursing home residents are particularly affected. More than 3/4 of the respondents are satisfied or even very satisfied with their life situation overall. At the same time, there are indications of growing emotional vulnerability - especially in the case of chronic pain conditions, the need for care, greater cognitive losses and the loss of close people (ÖPIA, 2015). There are approximately 8,901,064 people living in Austria (60+ years: N = 2,259,262; 65+ years: N = 1,693,627; 75+ years: N = 851,592) (Statistik Austria, 2020). The life expectancy of those born in Austria in 2019 is 79.54 years for men and 84.21 years for women (Statistik Austria, 2020).

With regard to living arrangements, **gender-specific differences increase with age**. While men live to a large extent in partnerships up to the highest age groups, women often spend their twilight years living alone, especially in the 80+ age group (Statistik Austria, 2020). **The proportion of women and men in nursing homes increases rapidly with age.** While it is barely 0.5% for the under-60s and less than 3% for the 70s, the proportion rises to almost 20% for very old men and over 30% for women. By far the largest groups in the homes are the 85- to 95-year-olds (Statistik Austria, IIBW, 2017).

Concerning the family and kinship networks, it can be seen that they consist of an average of 8.5 persons among persons over 75 years of age. Men have a somewhat larger network - also because they usually live with a partner. As many as 28% have only three or fewer relatives, but 36% can rely on a family network of ten or more people. People over 85 years of age have only a very small number of living relatives in just over a third of cases. These networks become tighter with increasing age: for example, about 39% of the very old (85+) live in four- and multi-generational family networks. Among women aged 80-84, 30% live with a (grand)child in the same house, and among those aged 85 and over, the figure is 37%. About 22% of those aged 85 and over no longer have any living relatives. And these networks are intensively maintained: As many as 75% of people over 70 have contact with their family members at least once a week, 18% maintain contact once or twice a month, five percent do it once or twice a year and only two percent never have contact with their family (BMASK, 2009).

Nevertheless, seniors often suffer from loneliness: about 28% feel lonely (Fessel & GfK, 2003). A distinction must be made between social isolation due to the lack of social contacts and the loss of peers and subjective feelings of loneliness. Loneliness researchers, however, make it quite clear: although many older people have fewer contacts than younger people, they perceive being alone as less stressful (Possemeyer, 2002). It is only in the very last period of life that old people are

lonelier, but the real cause is depression, according to the German psychologist Frieder Lang of the Martin Luther University of Halle-Wittenberg (ibid.).

When **social networks become smaller in old age** and functional limitations make social participation more difficult, the risks of loneliness and social isolation increase. Austrians are preoccupied with the fear of loneliness when thinking about old age (market Institut, 2017). Around two thirds of all respondents estimate that it could happen to them to become lonely in old age. These concerns play an even greater role among older people. Many people not only see a quantitative decline in their social contacts in old age, but also expect a qualitative deterioration of contacts (market Institut, 2017).

"Loneliness" and "Social Isolation" - a demarcation: Loneliness and social isolation are closely related, yet distinct concepts. Loneliness is the subjective experience of negative feelings in relation to the amount of social contact (Cotten, Anderson & McCullough, 2013, cited from Perlman, 2004). Neves et al. (2017, citing Cornwell & Waite, 2009) also hold that social isolation and loneliness are related, yet distinct, as social isolation is based on low/absent levels of social support and participation and reduced quality/quantity of social ties. While the phenomenon of loneliness refers to the perceived feeling of lack of company and abandonment (Neves et al., 2017, cited from Perissinotto et al., 2012). Loneliness can be chosen by the individual (deviant behaviour) or be the consequence of social exclusion processes (e.g. in old age) (Hillmann, 2007). According to Weiss, there are two different forms of loneliness: emotional loneliness resulting from the absence of an intimate partner, and social loneliness as a result of the absence of supportive friends and of being embedded in a social network (Weiss, 1975).

Assessing loneliness and social isolation in German-speaking countries: Loneliness can be assessed, for example, with the German version of the revised *UCLA Loneliness Scale* (Döring & Bortz, 1993) consisting of 20 items. The German questionnaire is based on the revised UCLA Loneliness Scale developed by Russel et al. in 1980. The *Lubben Social Network Scale* with 6 items (Lubben & Gironda, 2003), which was translated into German by Bredehöf (2015), can be used to assess social isolation. In summary, it can be stated: People living alone or isolated do not have to be lonely, but social isolation and being alone can promote feelings of loneliness and thus, while not sufficient conditions, are certainly risk factors for loneliness.

Challenges and risk factors for "loneliness in old age: Psychopathologically, loneliness is associated with a number of psychiatric disorders: It has been shown to be associated with anxiety (Mijuskovic, 1986), social phobia (Moore & Schultz, 1983), schizophrenia (Deniro, 1995), depression (Goswick & Jones, 1981), parasuicide, suicide and suicidal ideation (Birtchnell & Alarcon, 1971; Peck, 1983), eating disorders (Coric & Murstein, 1993) and obesity (Schumaker, Krejci, Small, & Sargent, 1985), alcohol and drug dependence (Brennan, 1982), sleep disorders (Cacioppo, Hawkley, Berntson et al., 2002), fatigue (DiTommaso & Spinner, 1997) and increased distress (Kiecolt-Glaser, Ricker et al., 1984). A long-term clinical study also found a causal relationship between loneliness and dementia.

The risk of dementia was found to be more than twice as high in lonely people, even when statistically controlling for social isolation (Wilson et al., 2007).

Socio-political aspects and measures: Safeguarding health is a public task in Austria and this means that the federal government, the provinces, the municipalities, the social insurance system and statutory interest groups are responsible for various sub-sectors of the health system. "The **COVID-19 pandemic** is not only an immense challenge for public health, but also poses an enormous task for the social system." (BMSGPK, 2021)

In the area of social and health services, the evaluation of the quantitative **survey of the BMSGPK study** shows that the target group is particularly affected by the prohibition of visits, service restrictions and psychological stress: psychological stress, restriction of the range of services, visiting and contact restrictions and gaps in the range of services. A **concrete recommendation** from the BMSGKP study is that **the (digital) accessibility of older people** became an important issue during the pandemic. Social organisations are required to develop concrete concepts for maintaining an appropriate contact density and quality under lockdown conditions (BMSGPK, 2021).

B) Networks, tools and measures

Existing networks for the prevention of loneliness in old age emphasise the importance of actively involving older people, as active participation in social life protects against loneliness and promotes life satisfaction and health (Gesundes Oberösterreich, 2020). In the report, we present the following initiatives, programmes and projects that take on this task - at different levels: Austrian Seniors' Council, Seniors' Web Association, Digital Day Centre "Seniorenweb", Healthy Austria Fund (FGÖ). As examples of successful coping strategies against loneliness in old age, we present the project "Gesundes Oberösterreich", of the Upper Austrian Zukunftsakademie, the association "Vollpension" - old and young bake (also online) and the Circle of Friends - an example from Finland. All these projects are about involving older people and keeping them "in motion", so to speak.

Possible cooperation partners for the Digi-Ageing project are, in addition to the organisations mentioned above, above all: A) Institutions that develop/offer measures against loneliness in old age; B) Institutions that care for and look after older people; C) Private individuals who care for and look after older people; D) Institutions that offer training and further education opportunities in the care sector; E) Institutions that deal with digitalisation and F) All other institutions/persons who are interested in the project.

C) Learning about "loneliness"

The dangers of "loneliness in old age" are well studied: loneliness in old age increases stress, reduces defences, and can accelerate physiological ageing, frailty and the decline of cognitive



abilities. The risk of depression (the suicide rate for men is twice as high as for the average population from the age of 75) and dementia is also increased (VIA Health Promotion Switzerland, 2014).

Nevertheless, the health sector still seems to contribute little to the prevention of "loneliness in old age": awareness of social isolation and loneliness within the nursing and care staff does not seem to be very pronounced. The implementation of training on the topic and also on the use of communication technologies in the care sector would be urgently needed. Social participation among older people became particularly explosive during the Covid-19 crisis. In Austria, a "round table" on loneliness in old age was convened at the Chancellery in September 2020. The result was that the government and aid organisations are striving for a pact against loneliness. The first measures to be taken are to create "greater awareness in our society" of the issue.

Since older people, as a vulnerable group, were and are particularly exposed to the health consequences of social isolation and loneliness during the period of isolation in the Covid 19 pandemic, according to Armitage and Nellums (2020) new communication technologies such as mobile applications are a sensible strategy to counteract social isolation and loneliness and to avoid consequential health damage. Explanations of their effect lie in the strengthening of cognitive flexibility, self-efficiency and self-confidence and are thus ideal for ensuring empowerment.

Education, training and awareness raising: Education and training of health workers to deal with social isolation and loneliness will require a broad-based approach, similar to the training of the workforce to deal with the social determinants of health. It will be necessary to train all health professionals, including specialists and indirect care workers.

In Austria, nursing education and the training of health professionals are located at universities and universities of applied sciences. Therefore, there are **many possibilities to complement the curricula of any secondary and tertiary education in the health sector** in order to strengthen the awareness of this important health determinant.

Overall, it can be seen that **the topic of "loneliness in old age" is still hardly taken into account in nursing education** in Austria. "**Digitalisation"** - with regard to the use of digital tools in the care sector - also **plays a subordinate role** at present.

Projects like "Digi-Ageing" are important to bring the topic to the fore, to inform about the serious effects of loneliness and to build a network that actively and jointly works on solutions.

2.2 Main findings for Cyprus (by Agecare & UCY)

Part A) Loneliness in old age seen as a social phenomenon

In Cyprus, older people are still close to their families but not as close as they were in the past, as their value as members of modern society is being diminished.

Demographic data on ageing in Cyprus: The percentage of older adults (65 or over) has increased rapidly among the total population of Cyprus. The data showed that the percentage of elderly who live alone in Cyprus is low compared to the average of Europe. In addition, studies have found that the only a small percentage (10.4%) of older adults aged 65 to 74 years are economically active in Cyprus and that most older adults in Cyprus have low ICT skills and are not familiar with modern technological devices. Only 26% of older adults use the internet at least once a week compared to the 45% of older adults in rest of the European Union countries.

Care structure for older people: The family unit is the foundation of Cypriot society, providing emotional and economic support to the individual. Adult children are expected to care for their elderly parents into their old age as much as they can, even though their ability to do so is diminishing due to demographic reasons. The adult children are usually the ones who take responsibility to ensure that their parents are not left alone by acting according to the level of support and care they need.

"Loneliness" and "Social Isolation" - a demarcation: Loneliness is a subjective negative emotional state caused by the need to connect with someone, and the absence of that potential. Loneliness emerges even if the individual is surrounded by others. It is also related to the lack of emotional support. Some of the negative effects associated with loneliness have an impact on quality of life, cognition, subjective health, stress and depression, decreased quality of sleep, disability, cardiovascular disease and institutionalization.

Social isolation is more objective and related to the lack of social interactions and relations. It can be measured objectively by the number and frequency of contacts with others. Both social isolation and loneliness have a negative impact on physical and mental health of the older adults.

Challenges and risk factors for loneliness in old age: The risk factors for loneliness in old age include living in rural area, widowhood, poor functional status, lower income and education, urinary incontinence, subjective causes, depression, living alone.

Care homes often face particular challenges such as uneducated staff about loneliness, lack of entertainment activities for residents, lack of consistent and standard tools to identify and monitor the psychological state of each resident which contribute to the phenomenon of loneliness in older adults.

Special challenges posed by COVID-19: In Cyprus, social isolation is one of the core measures taken to reduce the spread of the virus, prevents family from interacting with their loved ones. These measures also had impact on the variety of daily activities of older adults such as visiting neighbours, going for coffee and backgammon to the Cypriot traditional cafes "kafenio". This has affected their sense of belonging in the community and has increased loneliness. Furthermore, in order to minimize the chance of infection of older adults, local authorities banned visitors to nursing homes and long-term care facilities, resulting in the residents of the units becoming more socially isolated and residents with cognitive diseases to be affected more psychologically. Also, the level of anxiety among the staff of the care homes has dramatically increased resulting in a more stressed working environment.

Current measures for older people during the pandemic: The local authorities issued measures to protect the older adults and adjust them according to the current situation. During periods that the country was not in total lockdown, the government issue measures to protect older adults such as allocating specific time for older adults to be served in shops and services without allowing the presence of the rest of the population.

B) Networks, tools and measures

Existing Networks to prevent loneliness in old age: Due to COVID-19, all networks existing in Cyprus to prevent loneliness in old age are under-operating or are closed.

Initiatives, programs and projects: Some of the existing networks in Cyprus are community day-centers for older adults, different NGOs relating to older citizens, lifetime learning classes and retired professionals' associations.

The centers are open weekdays morning hours, and provide an opportunity for socialising, learning, maintaining skills and cognitive fitness through activities, and stay healthy through basic monitoring and health-promotion activities.

Good examples for coping strategies: Recommendations from the National Gerontology Center of Cyprus include for older adults to familiarized themselves with online and other digital technologies for social networking but also for cognitive exercises. Also, they recommend frequent telephone contacts from community members to the older adults in order to provide them meaningful and supportive conversations. In addition, they highly recommend to provide specialist psychological support at home and they suggest that older adults should be encouraged to do physical activities in order to reduce the negative impact in their psychological and physical status.

Possible cooperation partners for the project: As Materia, our strongest network is with the primary users (older adults) and their family members. Other than our extensive current and alumni client database, a variety of organisations can be involved. Municipal day-care centers and Senior

day clubs already have a long-standing collaboration with Materia and cater to needs of older adults in the community. These bodies lose a portion of their beneficiaries due to worsening of their health condition and now Digi-Ageing tool will be able to assist them in continuing receiving these services. Materia Group has a long history of collaboration with a wide range of healthcare professionals who care for older adults in the public and private sectors. These health care professionals can be our spokespersons to get the word out and recommend the Digi-Ageing platform.

UCY has a long collaboration with the Ministry of Health, Services for the Elderly of the Social Welfare Services, Department for Social Inclusion of Persons with Disabilities, Melathron Agonison EOKA and representation of the European Commission in Cyprus. These partners could also have an interest as secondary stakeholders in the Digi-Ageing platform.

Identification of "loneliness" – measures & tools: Older adults need care and advice regarding their psychological needs. They also need more home visits by their health carers and family and friends. The carers mentioned that more health services are needed, as well as more professionals from different disciplines besides doctors. There is no evaluation of quality and monitoring of their health care service from the Cypriot Ministry of Health and as a result there is no evaluation if any prevention measures are taken for loneliness in old age. Other needs are better coordination between the professional carers and their supervisors, as well as the need to establish a legal framework for home caring that includes prevention actions for loneliness. Also, the health care system needs to connect with the broader public health and social care communities to establish a firm connection to ensure better communication, treatment and quick response, in order to determine best practices and approaches: quality, funding, and research gaps.

Methods and Tools to identify and measure loneliness: In Cyprus, is very uncommon for healthcare professionals to use any tools to identify and measure loneliness. Healthcare professionals in Cyprus, focus in administering usually assessments that evaluate depression in older adults such as the geriatric depression scales (GDS) However some professionals have been using the Social and Emotional Loneliness Scale for Adults (SELSA). Other international tools identified were the Berkman–Syme Social Network Index, the Revised UCLA Loneliness Scale, the Three-Item UCLA Loneliness Scale, Steptoe Social Isolation Index, the Cornwell Perceived Isolation Scale and the De Jong Gierveld Loneliness Scale.

Methods and Tools on preventing loneliness: Older adults already use existing digital tools in the form of smartphone applications to combat the effects of isolation due to the COVID-19 pandemic. The research categorizes the apps in 6 categories: Social Networking, Medical: telemedicine, Medical: prescription management, Health & Fitness, Food & Drink, and Visual & Hearing impairment. Some of the available applications and platforms are the + Simple platform, Guided Access Mode app and Social networking sites such as WhatsApp and Viber. Connect2affect is a new initiative.

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Digital tools as an opportunity: An idea would be to utilize large touch screens where older adults would be able to see clearly what is displayed and interact easier with the User Interface (UI), instead of focusing on mobile screens where a large number of elderly people are still unfamiliar with and unaware of how to use them.

C) Learning about "loneliness"

Gerontological findings on the phenomenon of loneliness: No studies were found in this topic for Cyprus. Therefore, findings from international studies provided an insight of this phenomenon. Studies suggested that the prevalence of loneliness among older adults varies across studies as a function of the (a) measure of loneliness used, (b) populations studied, and (c) age group and sample sizes considered. It is highlighted the importance of all types of health professions and carers that are involved in care of older adults to be educated regarding such important issues such as loneliness and social isolation.

Current measures in education and further training programs to prevent loneliness: There are no specific training programs to prevent loneliness in older adults in Cyprus. This highlights the importance of this project and how helpful could the outcomes be.

Main learning gaps regarding "loneliness": Research has identified the need to incorporate in the curriculum of the healthcare professionals' modules referring into identifying and preventing loneliness not only in Cyprus but also worldwide in the universities. International studies recommended in the topic of educating and training healthcare professionals to start by establishing training programs dedicated only for this purpose, accrediting certifications, and loneliness becoming a subject to exams on medical sciences field. These steps will emphasize the importance of knowing about loneliness and thus attract more healthcare professionals to educate themselves.

2.3 Main findings for Italy (by CDPZ)

Part A) Loneliness in old age seen as a social phenomenon

The time of 65 years is now out-dated and in our country we are aging about 10 years later. To be exact, the SIGG has moved to move the threshold of seniority to 75 years (like in other EU countries; for example in Austria), considering an average among the following subgroups:

- "Young Seniors", people between 64 and 74 years of age;
- "Seniors", between 75 and 84 years old;
- "Older Seniors", between 85 and 99 years of age;
- "Centenarians", all the lucky ones to exceed the 100 years old.

The Italian population is rapidly aging. The process of modernization and social secularization on the one hand and medical-scientific progress on the other, in recent decades have deeply affected the two main demographic determinants of population growth (or its decrease): fertility and mortality. Italy is among the countries with the highest percentage of elderly people.

Currently, the life expectancy at birth of males is 80.1 years, while that of women is 84.7 years, and as a result the elderly have become more and more numerous. 70.0% of the population living in Italy gave a positive opinion on their state of health, answering "very well" or "well" to the question.

The prevalence of people who claim to enjoy a good state of health decreases dramatically as age increases: it drops to 63.4% among people aged 55-59 years, to 54.3% in the next age group 60-64 is further reduced to 40.2% for people aged between 65 and 74 years and reaches 24.8% among people over 75. Already in the class 55-59 years old suffer from chronic degenerative diseases 51.5% of the population and the share reaches 85.2% among people over 75 years old. Among the elderly also increases comorbidity, which in the case of people 75 years of age and older is 65.4% in general to the disadvantage of women (57.3% among men and 70.9% among women).

Elderly people live in this way today in characterized family contexts:

- the majority presence of "couples without children" up to the threshold of 84 years: this is the case for 48.0% of people between 65 and 74 years, for 40.4% of people between 75 and 84 years;
- by a significant presence (19.9%) of families with couples between 65 and 74 years of age in which there are still children who have not yet left the parental nucleus;
- from families with all elderly: from 21.9% in 2003 to 23.9% in 2012-2013 for families of 65+ and from 10.4% in 2003 to 12.7% in 2012-2013 for families of 75+;
- by a considerable percentage of families composed of "single persons": 48.7% of families composed of single persons are elderly 65 years and over, of which 17.0% of persons

between 65 and 74 years of age; 20.7% of persons between 75 and 84 years of age; 11.1% of persons over 85 years of age;

- from the prevailing condition of "single person" after the age of 84 years: it is so for 52.2% of people aged 85 and over;
- among men, the percentage of single people aged 65 and over is 30.0%, while among women it reaches 62.5% (gender gap of 32.5 percentage points);
- women have an overwhelming experience of widowhood: 83.5% of widowed people aged
 65 to 89 are women.

Some specific data about Veneto Region:

In Veneto on average, you live a little longer: the life expectancy at birth in 2018 is 83.6 years (81.4 for men and 85.8 for women).

People at least 65 years old are 1 million and 122 thousand, equal to 22.9% of the population (22.8% in Italy). Specifically, 5.8% of Venetian residents have an age between 65 and 69 years, 10% between 70 and 79 years old, while the over-80s are 7.1% (347,165 people).

In Veneto the elderly living in the structures residential are about 33 thousand. About 3% of the elderly population in Veneto lives in residential structures. Statistical data and scientific research on the numerical dimension of "living alone" show that the manifestation and progression of this phenomenon are associated, in many areas of the world, with three orders of factors:

- the change in the type of family nucleus, with a tendency to a dizzying increase in the number of "one-person families";
- the significant reduction in births;
- the increase in the average age of life which, according to the most updated projections, will lead to a radical ageing of the world population.

In Italy, according to ISTAT 2015 data, 18% of the elderly perceive a weak social support network, particularly among 65-74 year olds, 17% perceive a weak support and among the over 75s the share is 19%, without significant gender differences. These percentages are reduced among seniors over 75 years of age (22% for men and 19% for women), partly due to the greater formal help received (families over 75 receiving help from a person responsible for caring for the elderly are about 10% compared to 6% of all families with at least one elderly person).

Two meanings of social isolation and loneliness can be identified:

- subjective as perceived scarcity of one's own social resources, such as company or social support;
- objective i.e. a lack of contact with others due to situational factors (e.g. a small size of the social network, rare social interaction or lack of participation in social activity).

B) Networks, tools and measures

In Italy, after age 75, four out of ten people have no family or friends close by (source: ISTAT, year 2018).

The main risk factors, that contribute to the prevalence of loneliness among older adults, are:

- multi-morbidity: statistics show that diseases strongly increase loneliness;
- level of education: following what is written in the previous paragraphs, better studied reduces risk of isolation;
- when a senior lost family relationships his/her social network strongly suffers;
- inability to attend recreation centres for the elderly (for physical or mental reasons);
- low level of transportation, private or public (again, risk of isolation);
- low level of personal security (this risk has been strongly increased during Covid19 period);
- low level of accessibility in public or private areas (for elderly people with disabilities);
- low level of low level of digital literacy and accessibility to digital tools;
- absent or not very widespread territorial medicine.

The main challenges for elderly care homes and mobile care (home services for caregivers/nurses) are:

- how to link their services to the local needs;
- better dialogue and collaboration with the single area;
- for the social workers: expand the range of services (not only at administrative level, but also as "social animators");
- stronger and better training for social workers, caregivers, nurses, etc.

We already identified a good number (11 institutions) of national and regional cooperation partners that, for sure, will support us for the next project activities.

The elderly and/or those suffering from chronic diseases pose a great challenge to the community today and, in particular, the demographic aging of Western societies is insistently questioning the systems that deal with health in order to follow new paths for taking care, not only of diseases, but of the whole person. If we consider ISTAT data, we find that 30% of elderly people are living alone suffer from denial of stimuli and lack of social involvement. What we can do as a society is to be able to interpret the passage of time according to a positive approach, that of longevity.

The health emergency (Covid19) has overwhelmed nursing homes like a hurricane, which initially found themselves at the mercy of the situation, without men and means. In general, also due to the pandemic (that strongly reduced the physical contacts and increased, in general, the isolation and

loneliness) elderly people started to use, in a basic way, smartphones and tablet (for example just for staying in contact with relatives and/or caregivers).

C) Learning about "loneliness"

To support the elderly, fragile people and disabled persons, digital literacy has been introduced with the aim of developing digital and technological skills. **The elderly risk being excluded from the digital society.** Many, however, are the companies that allow the digital literacy of the elderly. Among the most appreciated methodologies is e-learning and the inter-generational learning model. In the case of digital health, innovation is more than simply replacing the analogue paper system with a digital system; it is also a great opportunity to improve healthcare processes and thus make the entire healthcare system more effective and efficient.

As far **as technological evolutions are concerned**, even in the healthcare field the last decade is experiencing an innovative development never seen in the previous years. We have been referring, for a long time, to areas that will have a heavy impact also on the way of doing Healthcare, even if they are not specific to healthcare only.

Regarding the main learning gaps regarding "loneliness" it can be stated that the elderly and/or those suffering from chronic diseases pose a great challenge to the community today and, in particular, the demographic aging of Western societies is insistently questioning the systems that deal with health in order to follow new paths for taking care not only of diseases but of the whole person.

The challenge is to continue to innovate and produce systems and technologies, perfectly compatible with each other, for the benefit of those who need to control and be controlled remotely within and outside the home. We are thinking in particular of Alzheimer's patients, for example, and all those suffering from dementia or loss of orientation. These and others are the primary objectives of telemedicine. Tele-monitoring allows the remote assessment of vital functions captured by special sensors (devices). The possibility of being able to monitor at home or in non-hospital facilities the main parameters related to health (blood pressure, cardiac function, blood glucose values, oxygenation status, etc...) by flowing data to special reporting and monitoring facilities, would greatly reduce the costs of the health system and simultaneously offer valuable help for the prevention and treatment of the most common diseases related to aging. A family member or a caregiver (health operator) using particular multifunctional technological platforms, controllable by smartphone or accessing special portal, could collect these data thus avoiding to move the elderly person with all the inconveniences for the patient and his family.

2.4 Main findings for Lithuania (by MRU)

Part A) Loneliness in old age seen as a social phenomenon

Lithuania as most of EU countries has an aging population. Population aging is both a universal and a unique phenomenon. The numbers of elderly people, retired people, disabled elderly, people who receive home help, social care, long term care, people living alone are increasing over years. There are differences between cities and rural areas, and in various elderly ages groups. Lithuania has no single, discrete long-term care scheme, it is financed by the municipalities and State and could include financial support and health or/and social services for those who are dependent on others.

At the beginning of 2019, the estimated resident population of Lithuania totalled 2 million 794.2 thousand persons, which is by 14.7 thousand (0.5 per cent) less than at the beginning of 2018. The decline in the resident population in 2018 was caused by negative net international migration and the natural decrease. The impact of negative natural population changes accounted for 77.6 per cent of the total decline (Official statistics portal, 2019). At the beginning of 2019, there were 552.4 thousand elderly people (aged 65 and older), or 19.8 per cent of the total resident population. Each seventh man and each fourth woman were aged 65 and older. Compared to the beginning of 2018, the number of elderly people increased by 0.6 thousand, or 0.1 per cent. Age dependency ratio in 2019 was 30, it is gradually increasing over years, in 2010 it was 26 (Official statistics portal, 2019; Statistical yearbook of Lithuania, 2019).

Social service needs are determined on an individual basis according to a person's dependence and the possibilities of them developing independence as a result of provision of the appropriate social services. Institutionalized social care is available to those with disabilities as well as the elderly in need. Long- term care and social cares is provided for elderly in Lithuania. Joint Report on Health care and long-term care systems and fiscal sustainability (2016) defines that in Lithuania there is no single, discrete long term care scheme, long term care is financed by the municipalities and State as a part of health care and social services. Long term healthcare is provided irrespective of the age of the person, according to the condition of their health and the progress of any disease or complication. Long term healthcare includes medical treatment, palliative care and nursing, it is designed to meet the needs of those who are dependent on others because of illness or disability. Home delivery of food or medicines are provided to seniors in all Lithuanian municipalities, and they only need to notify their municipality that they wish to receive such services. In addition to the usual social and health services, the country's municipalities also take care of the good emotional well-being of seniors during the quarantine period. Psychologists are ready to help remotely the elderly of all Lithuania to cope with emotional difficulties arising during the quarantine.

In the aging Lithuanian society, **the aspects of the "loneliness" and "social isolation"** of older people are becoming more and more relevant. Although often older people are reluctant to acknowledge these complexities of life. As various studies show, older people associate loneliness and social isolation with a failed life, their worthlessness as a person. Therefore, often instead of tackling these

problems even more, they do not share them with friends or loved ones. Focusing on preventing the social isolation of older people and measures to strengthen social inclusion, including through the use of information technology tools, would not only prolong life but also significantly improve their quality of life. A study of the loneliness of older people in Lithuania (Mikulioniene et al., 2018) showed that various manifestations of loneliness are to some extent characteristic of both those living alone and living together with others. Elderlies with a wider, stronger social network receive more support of this kind, and for others it becomes an insurmountable task. One of the obstacles to using the available social network is not acknowledging one's loneliness. Participants in the study noticeably shook the attribute of loneliness, claiming to have a wide range of relatives or friends who take care of them, as well as being very busy with social activities or household. **Loneliness is often understood as a personal flaw**, meaning inferior human value, so one does not want to be the one to be pitied. However, individual strategies are most often used - loneliness is left with loneliness. In addition, communication with children and grandchildren is not mentioned among the strategies for overcoming loneliness - when you feel lonely, communication is sought among the representatives of your generation.

In scientific discourse, **social isolation is conceptualized in different ways**, but many researchers agree that it is a multifaceted and dynamic process that has negative social, economic, political, and cultural consequences for people's lives. According to statistics (Eurostat, 2016; Social protection, 2015), 65 the threat of poverty or social isolation of the Lithuanian population aged and over is slightly higher than that of the entire population of the country as a whole, these rates were 36 and 29.3 percent, respectively (Eurostat, 2016). 65 m. and older men are relatively much less at risk of poverty or social isolation than women. In addition, this indicator for men in 2005-2015 was much more stable (ranging from 23 to 35%). Older people living in one-person households are particularly at risk of poverty or social isolation. According to some dimensions of social isolation, older people in Lithuania have to take the lowest position among older people in all EU countries. The results of the subjective self-assessment of physical security show that among the 28 EU countries in Lithuania, the proportion of older people who feel safe in the evening at dusk in the city where they live is the lowest.

At the beginning of 2020 **the COVID-19 pandemic spread rapidly** around the world and fundamentally changed people lives. Older people have not only faced increased infectivity and mortality threat, but also experienced emotional loneliness and poor mood. With the introduction of quarantine in the country, people are provided with the same services as before. During quarantine, the Ministry of Labour and Social Affairs recommends assessing a person's needs for social services remotely, discussing individual assistance needs and their intensity with the person or their relatives. Social workers visit those elderly that have no telephone and live-in single farmsteads. All the clients are informed that contact with a worker is allowed only when delivering food, medicine, ensuring the necessary personal hygiene, bringing fuel and water. However, social workers and volunteers taking care of elderly are advised to provide them with supplies of food or

medicine for a longer period of time so that they can visit them less frequently and thus reduce the risk of contracting the virus.

B) Networks, tools and measures

We identified several initiatives, programs and projects dealing with the theme in Lithuania: The project "Food on Wheels" aims to reach the most poverty-stricken seniors who often lives without a hope to receive any help. For them hot soup it's not only a chance to eat but also an opportunity to socialize with volunteers. "Maisto bankas" organization's volunteers every day go to 500 retail chains to collect food that is no longer sold but still fit for human consumption, inspects it after it is stored, sorts it and assigns it directly to missing or other non-governmental organizations (families for families, seniors, disabled people's). The "Silver Line" helps to solve the problems of separation, loneliness and lack of communication of the elderly, giving the elderly the opportunity to enjoy a full life. It is a free friendship chat and emotional helpline for seniors. These are only some examples we further explain in our Desk Research Report in more detail.

Good examples for coping strategies: The Utena District Municipality Administration, implementing the project **"Integrated Services for the Family in Utena District"**, together with the project partner - Utena District Social Services Center, started to provide food, medicine, hygiene and / or other necessary goods purchase and / or delivery service assistance paying taxes. This is only one example; more to be presented in our Desk Research Report.

According to the Department of Statistics, only 40% of the country's population aged 65–74 use the Internet. This means that almost every second resident of this age has not yet discovered the possibilities offered by the Internet. There are sites dating sites for elderly "60+" and "Dating 60". Online communication is popular not only among young people, but also among seniors, who have also started looking for friends or even life companions on social networks and dating sites. This is especially true in this period of self-isolation, as seniors are at risk for coronavirus and cannot leave their homes without good reason, so they can only communicate with the help of technology. The project "Connected Lithuania" provides an opportunity to gain practical knowledge on how to use the Internet safely and learn useful things that can make life easier and make the day new. Everyone can deepen their digital literacy knowledge on the website www.prisijungusi.lt. Theoretical and practical material is provided here for both beginners and advanced Internet and technology users.

Instruments for measuring the prevalence of loneliness are being developed. However, the diversity of the phenomenon and the variety of conceptual and methodological approaches are debated by scientists. At present, only a few more or less approved loneliness scales are found in the scientific literature: the UCLA Loneliness scale (Russel, Peplau, & Cutrona, 1980) and De Jong Gierveld extended (11 items) and short (6 items) Loneliness scales (Jong Gierveld, Kamphuis, 1985; Jong Gierveld, Tilburg, 2010). Another one is being developed in the scientific literature - the Social and Emotional Loneliness Scale for Adults (SELT-S) (DiTommaso, Brannen, Best, 2004).

Methods and Tools identified on preventing loneliness are for example The "Warm Visits" program, which is for single, mostly elderly people who rarely leave their homes due to health and other barriers without a circle of people close to them. Red Cross volunteers interact with elderly people, help them and visit them regularly. A "Social Prescription" for reducing the loneliness of older people in communities. The "social prescription" encourages primary care professionals to refer a patient with a non-medical cause of a health disorder to a link worker, who, together with the patient, selects appropriate target organizations for the activity. There are more examples in our Desk Research Report.

Digital tools as an opportunity: There exist various forms of senior education in the field of ICT. Most educational activities take place under the Universities of Third Age, which cover various study programmes, including developing ICT skills such as computer and Internet. Smartphone use is not that common a subject as it should be. Besides the U3As, there is wide range of activities organised for seniors on a local level or by non-government organizations. Some of them are free and some are paid. To help seniors socialize and become inclusive in society, governments also develop many activities for senior education characterized by various long-term plans to help the elderly be part of digital society.

C) Learning about "loneliness"

Gerontological findings on the phenomenon of loneliness: Old age is a natural stage in the path of life, which some dream of as a period of "earned rest", others think it will not come. As it is still poorly researched in Lithuania, our fears and hopes related to this specific age are often only a reflection of common myths. There is growing concern in Lithuania about the aging of the population - and that concern is justified, demographic aging is actually happening - even faster than expected, so the situation calls for relatively rapid complex solutions. However, the social exclusion of older people has so far received little attention from Lithuanian researchers. (Mikulionienė, 2016; Čiburienė, Guščinskienė, 2012). Impact of leisure, culture and art on health. Research on the cultural needs of older people and people with disabilities is not systematically carried out, making it difficult for these groups to benefit from the cultural sector.

Current measures in education and further training programs to prevent loneliness: At a national level, there are not many opportunities for education and training in relation to loneliness in elderly people and the importance of their social inclusion. It used to be Master studies of Social Gerontology at Mykolas Romeris University, unfortunately due to a lack of understanding of the importance of this program to society and insufficient number of students, the program could not be continued and was closed at about 2015. Currently, the subject of social gerontology is integrated into the general social work program and is found mostly in the bachelor's level social work programs of higher education institutions.

There is lack of specific training on loneliness regarding elderly people. **The main learning gaps are**: Loneliness is considered a social and health problem in health sector training, but there is no specific offer to raise more awareness. During COVID-19 emergency many digitization gaps in the educational sector came to light.

The Digi-Ageing project is important to anchor the topic of loneliness in old age in the training of caregivers in the future.

2.5 Main findings for Spain (by CAMINOS)

Part A) Loneliness in old age seen as a social phenomenon

In the national context, only 7.76 per cent of the Spanish society considers the issue of combating loneliness among older people to be relevant.

In Spain the ageing process increases continuously. The group of over 65-year-olds accounts for 19.3 percent of the total population. Similarly, the proportion of over-80s is also rising, who make up 6.1 percent of the population and will continue to gain in importance in the future. In 2019, life expectancy was 80 years for men and 86 years for women.

The majority of people over 80 years of age living alone are women, with 72.3 percent. The high number of women living alone can be explained by the high proportion of widows living alone (46 percent) and the higher life expectancy.

There is a 24% of persons over 65 years of age live in nursing homes with an occupancy rate of 86 percent at the nursing facilities. A study pointed out that in these cases the prevalence of loneliness is more than twice as high among women as among men. 68.4% of elderly people in senior citizens' centres said they felt lonely.

Regarding the **care structure in Spain**, social services for older people can be divided into the following five categories:

Servicios de Atención Domiciliaria (Domestic care services)

The service offers elderly people help in their private homes with their daily needs for four hours a week in terms of home care, meals on wheels, laundry, cleaning. The main objective is to keep elderly people at home as long as possible.

Servicio de Teleasistencia (Teleassistance Service)

This assistance service is a device connected to the telephone line which, by means of an emergency button, provides immediate 24-hour contact from anywhere in the house to specialised professionals who offer their support.

Servicios de Participación Social (Centros de mayores)

The senior citizens' centres are social service facilities outside the residential environment, which are intended to promote the coexistence of older people and encourage participation and social integration.

Servicios de Atención Diurna (Centros de Día)

Outpatient social service facilities that provide psychosocial, preventive and rehabilitative care for older people during the day to prevent or compensate for the loss of autonomy.

Servicios de Atención Residencial (Residential Care Homes)

Inpatient care services provide permanent or temporary accommodation and meals for elderly people. There are two types of home care: retirement homes and senior residences.

As for the image of "old age", In Spanish culture age is associated with loneliness. According to a 2019 report it is believed that 46% of older people live alone, but the truth is that only 20% of our elderly people really live alone. Also, being elderly and living alone has a negative connotation.

Loneliness is perceived as an abandonment by the family, eminently by the children and more specifically by the daughter who in the past was the one who cared for her older relatives. The population has a fundamentally negative stereotype about older people, which is associated with health and memory problems and physical disabilities ("they cannot take care of themselves").

On the subject of **the description of loneliness** in elderly people, a study of 2009 describes loneliness in old age as a stage in life when a series of losses occur that facilitate the appearance of a feeling of loneliness. Loneliness is described as "a painful conviction of being excluded, of not having access to that world of interactions, being a condition of emotional discomfort that arises when a person feels misunderstood or rejected by others or lacks company for the desired activities, both physical and intellectual or to achieve emotional intimacy". Loneliness can also be positive when it is objective and sought-after. Loneliness is also highly associated with a number of physical and mental problems like high blood pressure, different heart diseases, obesity, weakening of the immune system, anxiety and depression. Regarding social isolation, widowhood and social isolation are frequent conditions in the elderly; however, women have the highest incidence, given their higher average life expectancy.

Concerning the main challenges and risk factors for loneliness in old age, a research suggests that the groups most at risk of feeling lonely are women, older people, unmarried people or people without a confident partner, people living alone, people with lower levels of education, people with lower incomes and people belonging to ethnic minorities. Other causes that influence loneliness are way of living (having a good family network, having a partner), health (health issues affect the perfection of being lonely in a negative way) and age.

In regards to the **COVID-19 pandemic**, it is estimated that in Spain over 70% of the mortality related to COVID-19 has occurred in this population group (people over 65 years old). The most significant challenges posed by the COVID-19 pandemic are: the changes of the profile of residents over time, pre-existing weaknesses in the nursing home model, increased risk of infection for carers, and lack of specific training. Elderly people had additional complications like isolation from social distancing, psychological problems (i.e., anxiety and depression), negative management of end-of-life situations and difficulties in complying with infection prevention and isolation measures.

The Government of Andalusia introduced a series of strict measures mainly concerning retirement homes like: if a positive case is detected within 28 days of the last diagnosis, visits, holidays, etc, will be suspended; PCR tests carried out on all new admissions and residents who return to the centre after 10 days; visits limited to a single family member; or the introduction of a "humanisation plan" per centre to alleviate the effects of isolation. Also, the townhall of Madrid produced a report on how elderly people and their families can cope with the COVID-19 situation.

B) Networks, tools and measures

Some **initiatives** and **programs to prevent loneliness** in old age are *Teléfono de la Esperanza* (an NGO that offers telephone service for people in crisis situations), *Asociación Contra la Soledad* (an association that focuses on combating unwanted loneliness of elderly people), *Amigos de los Mayores* (organization who aims at fighting loneliness in elderly people through emotional accompaniment), and Tele-assistance services (i.e., *The Red Cross*)

Regarding **coping strategies** for elderly people suffering loneliness, Geriatrician Rafi Kevorkian developed 11 strategies to cope with emotional stress caused by loneliness that include to treat insomnia, to save photos, to build and maintain relationships, to stay active and to get a purpose in life.

For near future collaboration within the Digi-Ageing project, Asociación Caminos has considered local associations that work with elderly people like *Lux Mundi* and *Málaga Acoge* as cooperation partners, among others.

When studying the **main needs of elderly people** in danger of loneliness, we found the study "La soledad en el anciano", which highlights the following needs in elderly people: the need to communicate, to choose according to values and beliefs, for self-realisation, and to learn.

As for **needs of the health care sector**, the specific needs of the care professionals are essential to highlight for preventing the problem of loneliness in old age. Caregiver need to know the habits regarding the expression of their beliefs and to determine their actions according to their values and plan programs together that gives the possibility of expressing their religious or ideological beliefs.

Concerning the **identification and measurement of loneliness**, the following measurement tools have been identified and explained: The Revised UCLA Loneliness Scale, the ESTE Scale and the EDSOL scale. For loneliness prevention, we identified the following tools: *VinclesBCN* (app), *Conéct@te Intergener@cional* (app) and *Mi Plaza* (iniciative).

As for **digital tools** that can be seen as an opportunity, our research found the that, directed at elderly people, the Community of Madrid is launching a pilot program of online activities aimed at the region's elderly people in order to promote the active ageing of the population over 60 and



provide an option to stay in contact with their social networks due to the COVID-19 crisis. For geriatric nurses, social workers, care givers, and other workers, according to *Guidelines of best practices in Geriatrics of the Sociedad Española de Geriatría y Gerontogía* (2018) tools that focus on complying with ethical and deontological rules, respect the privacy and confidentiality of patients, offer clear, truthful, understandable, and quality information, and ensure that the prestige of the profession is maintained are helpful for care professionals.

C) Learning about "loneliness"

When searching for **gerontological findings on the phenomenon of loneliness**, we came upon a doctoral thesis that documented the following **conclusions**: the interpretation of loneliness and its cause influence the sense of control over it, elderly people prefer not to get engaged in long-term social activities and loneliness usually has a negative interpretation among elderly people (especially when it is attributed to external uncontrollable factors). The participants of the programme studied in the thesis experimented benefits in the following areas: 1) learning and personal development through the activities of the Programme, 2) psychological and emotional benefits thanks to accompaniment, 3) opportunities to enhance their social participation and 4) the establishment of new links through new relations with volunteers of the programme.

Regarding measures and training programs to prevent loneliness, a study from 2018 confirmed that older people who participate in intervention programs report significant and sustained improvements in their levels of loneliness, especially programs where they can interact with each other and that include activities such as group therapy.

3 Design for Field Research

In each of the partner countries, at least 10 persons have been interviewed who, either professionally or privately, are entrusted with the care of older people or offer education and training in the care sector. We have agreed on the following target groups for the surveys:

- **Group 1**. Geriatric Caregivers/Nursing Staff/ Social workers (min. of 6 pax)
- **Group 2.** Relatives who care for older people (min. of 2 pax)
- **Group 3**. Persons working in institutions that offer training in geriatric care (min. of 2 pax)

We decided to apply a very flexible research design, so that all partners had the possibility to use the best fitting methodology within their own framework and with their own resources. So, partners were free to carry out interviews (in person, by telephone, online) or via focus groups. Due to the ongoing pandemic, we are very grateful to all interview partners — especially those from the care sector - for their participation. We know that they all were under great pressure during this time!

In the matrix below, we lined up all the collected questions and assigned them to the three groups. After we had matched these contents with all partners, we drafted 3 questionnaires (one per group).

No.	Category	Questions	For group 1,2,3
۵)	Landinas	This want from the original section and distinct to the Deale	
A)	Loneliness	This part further informs IO1 (in addition to the Desk	
	(general)	Research)	
		What do you understand by loneliness in old age?	1,2,3
		Are you aware of the difference between loneliness and	1,2,3
		social isolation? How would you differentiate the terms?	
		How relevant is the problem of loneliness for elderly people	1
		in your institution? And for you as caregiver?	
		How relevant is the problem of loneliness for the person	2
		you care for? And for you as caregiver?	
		How relevant is the problem of loneliness for you as training	3
		provider? Is the theme integrated in your curricula?	
A1)	ICT/Digital Tools	Which digital tools do you use?	
		Which digital tools do you use in your institution as	1
		caregiver: e.g. for documentation, for planning, for	
		communication, etc.?	
		Which digital tools do you use in your family, to stay in	2
		contact with the person you care for?	

7	a

		Which digital tools do you use in your training sessions? Do	3
		you give any recommendations on digital tools for elderly people?	
		Which digital tools do elderly people use to overcome loneliness?	1,2,3
B)	Networks &	This part informs IO2 – Networks / Policy	
	external help	Recommendations	
		What measures do you take to soften the problem of loneliness?	1,2
		What measures do you recommend in your training program to soften the problem of loneliness?	3
		Are there external people or partners who support you in your institution to prevent loneliness?	1
		Are there external people or institution who support you and your family?	2
		Do you work together with other institutions or external persons on the theme of "loneliness in old age"?	3
B1)	ICT/Digital Tools	Which digital tools for networking/communication do you use?	
		Which digital tools do you use in your institution as caregiver for networking and communication?	1
		Which digital tools do you use in your family, to stay in contact with the person you care for?	2
		Which digital tools do you use in your training sessions? Do you give any recommendations on digital tools for elderly people?	3
	Digi-Ageing Network:	What do you think about joining a (virtual) network in your region that deals with the issue of loneliness in old age? If so, what do you expect from it? Please define your needs.	1,2,3,
C)	Identifying Loneliness	This part informs IO3 – Diagnostic Tool	
		How do you recognise if the person you care for suffers from loneliness? In your personal experience, what do you consider a clue or a sign that a person is suffering from loneliness or from a problem related to loneliness? Please think of things that a person suffering from loneliness will usually say or do.	1,2,3
		Which triggers (events, situations, feelings, personal features, personality traits, etc) do you think are related to	1,2

	the feeling of loneliness. Provide some examples from the people you care for.	
	Does the identification of "loneliness in old age" play a role in the trainings you offer? If so, please describe.	3
ICT/Digital Tools	Which digital tools do you know/use for identifying loneliness?	
	Do you know or use any (digital) tools to identify loneliness in your institution? (e.g. documentation tool). Please describe.	1
	Do you know or use any (digital) tools to identify loneliness as a private caregiver? Please describe.	2
	Do you use any (digital) tools to identify loneliness in old age in your training? Please describe.	3
Identification Tool:	In the project we will develop a tool to identify loneliness. Make a wish! What results do you want to get from such a tool?	1,2,3
Preventing Loneliness	This part informs IO4 – Tool on Preventing Loneliness	
	Once you know that someone has a problem related to loneliness, what kind of personal strategies or interventions have you used in the past that have helped the person feel less lonely?	1,2
	Do you address how caregivers can support lonely people in your trainings?	3
	What can older people do themselves to feel less lonely?	1,2,3
	How can the community contribute to soften loneliness?	1,2,3
	What services, programs or projects to you know to reduce loneliness in old age?	1,2,3
ICT/Digital Tools	Which digital tools (or methods) do you know to prevent loneliness?	
	Are there any (digital) tools or methods to prevent loneliness in your institution? Please describe.	1
	Are there any (digital) tools or methods to prevent loneliness you use as a private caregiver? Please describe.	2
	Are there any (digital) tools or methods to prevent loneliness you use in your training? Please describe.	3
Prevention Tools:	In the project we will develop tools to prevent loneliness in old age. Make a wish! What results do you want to get from such a tool?	1,2,3
	Preventing Loneliness ICT/Digital Tools	in your institution? (e.g. documentation tool). Please describe. Do you know or use any (digital) tools to identify loneliness as a private caregiver? Please describe. Do you use any (digital) tools to identify loneliness in old age in your training? Please describe. In the project we will develop a tool to identify loneliness. Make a wish! What results do you want to get from such a tool? Preventing In the part informs IO4 – Tool on Preventing Loneliness Once you know that someone has a problem related to loneliness, what kind of personal strategies or interventions have you used in the past that have helped the person feel less lonely? Do you address how caregivers can support lonely people in your trainings? What can older people do themselves to feel less lonely? How can the community contribute to soften loneliness? What services, programs or projects to you know to reduce loneliness in old age? ICT/Digital Tools Which digital tools (or methods) do you know to prevent loneliness? Are there any (digital) tools or methods to prevent loneliness in your institution? Please describe. Are there any (digital) tools or methods to prevent loneliness you use as a private caregiver? Please describe. Are there any (digital) tools or methods to prevent loneliness you use as a private caregiver? Please describe. In the project we will develop tools to prevent loneliness in old age. Make a wish! What results do you want to get from such a

Training on Loneliness

E)

	Loneliness	ioneliness	
		Have you dealt with the topic of "loneliness in old age" in your education and further training? Please describe	1
		Have you dealt with the issue of "loneliness in old age" as a	2
		private caregiver? Did you attend a course, or did you read	
		about the topic? Please describe.	
		Do you offer the topic "loneliness in old age" in your	3
		education and further training curricula? Please describe	
		What training, further education would you need? Think	1,2
		about the knowledge/skills you are missing.	
		What training, further education would you like to provide?	3
		Think about the knowledge/skills professional and private	
		caregivers are missing.	
E1)	Curriculum	Which (digital) tools, skills and methods do caregivers	
		need to prevent loneliness in old age?	
		Professional Caregivers: Which (digital) tools, skills and	1
		methods do you need to prevent loneliness in old age?	
		What would you like to learn? Describe your needs.	
		Caregivers in families: Which (digital) tools, skills and	2
		methods do you need to prevent loneliness in old age?	
		What would you like to learn? Describe your needs.	
		Training providers: Which (digital) tools, skills and methods	3
		to prevent loneliness in old age would you need for your	
		trainings? What would you like to teach? Describe your	
		needs.	
F)	Changes due to	What impact does the pandemic have on your tasks? What	1,2,3
	Pandemic	has changed? Describe your current situation and your	
		needs.	
G)	Comments	What else I would like to say:	1,2,3
9		•	

This part informs IO5 Curriculum for prevention of

loneliness

In the next chapters we summarize the results of the surveys per partner country.

In the national field research reports, two case studies per country were documented in order to let the carers speak for themselves. We have summarised these case studies in a brochure, which is attached to the Summary Report as Annex 1 and completes the field research.

3.1 Key results for Austria (by UMIT)

Description of the research process in Austria

The interview partners were contacted and recruited through existing contacts in the context of other projects as well as through the study programmes at the private university UMIT TIROL. A total of 12 certified nurses (DGKP) and two teachers (LP), who are active in health care and nursing training, were recruited for an interview. The inclusion criteria for the interview partners of group 1 were a completed health care and nursing training as well as existing practical experience as a professional caregiver in the care and support of older people. The inclusion criteria for the interview partners of group 3 were a teaching licence in health care and nursing training as well as existing practical experience with regard to a teaching activity in nursing training. The interviews were conducted virtually via Zoom or in physical presence. A further seven people completed the interview questions in written form in April and May 2021.

In our interviews, it emerged that caregivers define "loneliness in old age" as a subjective feeling that evokes negative emotions, whereby (desired) "being alone" is to be distinguished from this. The caregivers mention "limited contacts" as the main factor influencing loneliness in old age. In summary, almost all carers characterised loneliness with a negative feeling, which is related to limited contacts in the family environment and circle of acquaintances. Loneliness and social isolation are differentiated in that an individual can choose social isolation - an "extreme form" of being alone - for different reasons. "One can also feel lonely among many people." Nevertheless, loneliness can arise from social isolation, or loneliness in old age is also not infrequently accompanied by social isolation or increased loneliness. The problem of loneliness among older or elderly people is generally described as very relevant, especially in the current circumstances of the Corona pandemic. Especially in the area of old people's and nursing homes, this is a major problem for those affected. "The residents are not afraid of the virus. What is worse for them is being separated from important caregivers," said the nursing director of a residential home for the elderly. An administrative director of a nursing home in Tyrol said, ... "during the pandemic period I felt like a prison warden". When asked which digital tools are used in the respondents' facilities, only the digital care documentation system is mentioned. Digital tools for dealing with the problem of "loneliness in old age" are not known.

The **interviewed group of teachers** understand loneliness in old age as a multidimensional event. Loneliness has both **social** reasons and effects, **physical** reasons or **psychological** causes. Social isolation is not infrequently accompanied by loneliness, but it does not necessarily have to be related, as it can be self-selected. Loneliness is seen as a "phenomenon" with many influencing factors and effects. The **topic is not explicitly addressed in teaching**, but loneliness is "always connoted" as an aspect of activities of daily living (ATLs) in the sense of a "holistic view of care". **Digital tools** are used by older people "less than one would assume". However, it is observed that mobile phones are increasingly used by teaching relatives. With regard to preventive measures,

apps such as Facetime and Skype are mentioned. As a result, access to digital tools should be low-threshold and easy. In general, voice commands should be used rather than text.

Our **next question was about experiences with networks and external support** offered on the topic of loneliness in old age: Measures to cope with loneliness on the part of caregivers are mainly offering conversations and social activities, such as group activities, parties and celebrations or outings. Support from external persons or partnerships are not mentioned. Only WhatsApp is used for networking and communication within the care team.

The interviewed caregivers are basically open to participating in a (virtual) regional network for the exchange on the topic of loneliness in old age and would consider such an initiative useful, especially if criteria such as multi-professionalism or interdisciplinarity (nursing, psychology, medicine, etc.) as well as the inclusion of those affected are in the foreground. The teachers consider it important to join a (virtual) network in their region.

Loneliness is usually recognised by the nursing staff through the following criteria: Mood, gestures/mimic, behaviour, verbal expressions, withdrawal, sadness. Possible triggers for loneliness in old age are mentioned: Loss of a caregiver, moving into a nursing home, psychiatric illness, general introverted behaviour, pessimistic attitude, egoistic traits, low interest in other people, sudden need for care and illness, poverty, financial aspects or loss of close environment. It is problematic that it depends very much on the personal assessments of the caregivers, since loneliness is not recorded in a standardised way.

The teachers are of the opinion that trainees in care professions should know and recognise the phenomenon of loneliness. Empathy and interest in interacting with elderly people are important basic requirements. Digital tools for identifying loneliness are not covered in the training.

When asked how best to **prevent loneliness in old age,** we received the following answers: Holding personal conversations with those affected, whereby "active listening" is of central importance, as well as planning and implementing regular, different social activities, maintaining and cultivating social contacts. It is also important to **do things in pairs, to** experience things with people, to do things that the person cannot do alone. **Digital tools or methods** to minimise loneliness have not been used so far. However, such tools would be conceivable and desirable, provided that a "realistic offer to prevent and combat loneliness" is provided.

The interviewed **teachers** are of the opinion that older people can prevent and cope with loneliness by making arrangements within the family circle on how to maintain contact. At the same time, structures should be created to remain mobile. Preventive home visits are also seen as an opportunity to curb the problem. **Carers believe that** older people should remain active themselves: Join networks, be more interested in assisted living, day care facilities, shared flats, be open to innovative concepts like "students and older people helping/living together", technologies (get tablets and participate in digital events suitable for seniors), keep contacts and maintain hobbies.

The community can also make a valuable contribution by forming volunteer networks. The following existing programmes and initiatives are known to the teachers: Volunteer visits to residents in old people's homes, pastoral care, Catholic Women's Association, kindergarten visits to residents, integrated living, intergenerational evenings in the community centre, etc. The caregivers should create more offers in this regard.

The subject of **loneliness in old age is only a marginal topic in health and nursing education**. In the subject "Care of the elderly", the problem is dealt with to a greater or lesser extent depending on the teacher being taught. The carers would like to see targeted learning opportunities on recognising, preventing and coping with loneliness. **According to the teachers**, "Loneliness is not a concomitant but a 'diagnosis' with potentially clinical consequences." There is multi-professional responsibility, but there is a lack of networking and interdisciplinarity in this regard. An app would be an opportunity to connect the various actors.

The Covid 19 pandemic had - and currently still has - far-reaching effects on the work of health caregivers and family members who take care of elderly. From the caregivers' point of view, the measures taken in the context of the pandemic had a largely negative impact on the physical, psychological, and social well-being of the elderly, but also of the caregivers. For the teachers, the pandemic brought about the rapid conversion of the entire teaching operation to distance learning, which of course also posed a particular challenge.

In conclusion, it should be noted that the **respondents** are very interested in the Digi-Ageing project and would like to see the development of practical and affordable tools and results. Through the surveys, we have contributed to raising awareness of the topic of "loneliness in old age" and hope to have gained future network partners who will support us in taking the project idea further so that we can work together on solutions.

3.2 Key results for Cyprus (by Agecare)

Description of the research process in Cyprus

Even though COVID-19 social distancing measures Materia's team managed to recruit participants thanks to its extensive network, partnerships with healthcare professionals and in-house staff. The selection process involved approaching people with different backgrounds in order to gain a more comprehensive insight on how each professional and individual perceive "old age and loneliness". For the safety of all participants and researchers, due to the pandemic, all interviews were done one to one instead of focus groups. Also, three interviews were performed online via Skype as requested by the participants and the other eight were performed face-to-face following all the safety measures. The purpose of the field research is to provide real-life evidence about the needs and requirements of the caregivers in order to create the Digi-Ageing digital tool to prevent and identify Loneliness in old age, based on those findings. In Cyprus, ten participants were recruited for the interviews divided in three different groups. Group 1 included healthcare professionals who care for the older adults. Group 2 included relatives who care for the older adults and Group 3 included training providers.

Most of the participants had a basic idea of what loneliness is and the difference from social isolation but all participants mentioned that they are lacking knowledge on this topic. According to the testimonies of the participants, most the older adults in Cyprus (that they were aware of) are struggling with technology and digital tools. The technologies that older adults are most familiar are the TV and radio. However, the younger the older adult is (between 65 and 75) the more chances are that they have some basic familiarity with smartphones.

Healthcare professionals are mainly using two techniques/strategies to prevent loneliness in older adults: engage into meaningful discussion/communication with the older adults and engage/motivate older adults into various activities. The external support network for the healthcare professionals are other professionals who organize various activities, psychologists and the relatives of the older adults. This applies vice versa for the relatives; they consider the healthcare professionals their external support network. The relatives mentioned visiting their loved ones as often as possible as their mechanism to prevent loneliness. They stated that they would reach to their external support network only if they felt helpless with the situation. Nevertheless, all the participants apart from one, expressed their interest in joining future local virtual network under the conditions that it would mainly include simple instructions and exchange of practices.

Healthcare professionals and relatives reported the signs to identify loneliness, the potential risk factors and their needs for a potential tool that could identify loneliness. Some of the signs mentioned are: the person is a consistently moody, isolating their selves, avoid socializing and stop taking care of their selves. Some of the risk factors described by the participants are the loss of loved ones, nothing to do all day, long periods of social isolation, loss of purpose in life, losing their physical abilities such as listening, sighting, ability to move around etc. None of the participants were aware

of any available tools in the market that could identify loneliness thus they wished for a tool that would include short questionnaire, guiding instructions, examples and possible scenarios on how to identify loneliness, the use of visual effects such as videos and images and one of the participants wished for a mood recording.

In addition, healthcare professionals and relatives provided their opinion on **how to best prevent loneliness in old age**, what can older adults do, what can the community do to help them and whether they were aware of any available services, programs or projects to overcome loneliness. As it was outlined by the participants, older adults need to socialize and do activities that they enjoy preventing feelings of loneliness. The general impression from the answers of the participants is that the communities in Cyprus are not doing enough to support older adults and they suggested that the communities should organize trips, activities, events in places that have all the amenities for the older adults and make sure that the information is reaching them. Interestingly, the participants complained about the very limited services and programs available to assisting in such important problem.

The topic **Education & Training for overcoming loneliness** among the healthcare professionals, relatives and training providers was also discussed during the interviews. Surprisingly, most healthcare professionals did not have any education on the subject apart from one participant, leading to the conclusion that there is a serious need to create educational material for healthcare professionals in regards to Loneliness. Relatives expressed again that they only want a basic information about loneliness and some tips will suffice. They believed that emphasis should be given to the organization of activities and trips for this group of people and places to meet the appropriate amenities instead of spending resources to educate relatives.

During the interviews participants were describing two different situations the "before COVID" and "the life with COVID". Participants had the opportunity to discuss the **changes due to the Pandemic**. All the participants commented that the pandemic definitely has worsened the mental and physical status of the older adults and themselves. They have highlighted that the pandemic is leading everyday more people into the phenomenon of loneliness and that there is a vital need to establish some tools and foundations to help all those in need. They all wanted to be kept updated with the progress of the Digi-Ageing tool as it is needed more than ever now.

To conclude, results showed that loneliness is a severe problem in Cyprus that has a huge impact on the older adults' wellbeing and the Cypriot society in general. It is everyone's responsibility to be educated and trained in order to identify and be able to take preventable measures to overcome loneliness. Though there is a greater responsibility and serious need for governmental and public initiatives to provide such training opportunities.

3.3 Key results for Italy (by CDPZ)

Description of the research process in Italy

We basically took the interviewee names from our first local network. In fact, for the IO1-A1 desk analysis, each partner listed a certain number of stakeholder (at national and regional level) that comes from institutions, associations, elderly care centers and foundations. So, first of all we listed 20/25 potential names, and then we selected 14 participants that, in our opinion, were able to give an overall view of the isolation and loneliness in our country.

The field research confirmed, basically, the main findings of IO1-A1 (desk research) in the Italian situation. We conducted 14 interviews with different participants, shared into the 3 main groups. All the interviews have been done online, not in presence; due to Covid19 emergency and above all because participants are working on the health and care sector (that is still under strong restrictions).

Main findings: **Loneliness** is given by the distance or detachment of the subjects with whom I can interact; **Isolation**, on the other hand, is a psychological and social condition in which one is closed, and sometimes almost imprisoned, within oneself. More in details: by loneliness we mean a situation related to a subjective perception, by isolation we mean a condition in which the person is objectively isolated from the community, for example the isolation of guests in service centers due to the Covid19 epidemic. Sometimes, however, loneliness is something sought after, on the part of the older person. Some people may be physically alone (i.e., in isolation), but not feel so (i.e., in loneliness); or live surrounded by others, but still feel alone! Loneliness can also be a temporary condition, i.e. linked to a specific event or moment in life. However, it can evolve and become a chronic and disabling condition, which is then associated with anxiety and mood disorders.

All participants said that loneliness of the elderly is the most relevant problem for the coming years. And this overall trend is also confirmed by the data collected during the "desk research" phase. The impoverishment of the family, both in terms of number of members and economically, the reduction of births and the increase in average age, is leading and will increasingly lead to the abandonment of frail elderly people.

The topic is also well integrated into several courses that, organizations were participants work, offer to the market, free of charge or for payment. The project issues are very relevant for the elderly, because they have lost their affections over time and due to cognitive decline have lost their relational abilities.

All the participants in the phase of field research are using several digital tools; basically: Pc with office package, phone and tablet to communicate with colleagues, family members and to access multimedia content. The digital tools used by seniors to overcome loneliness are mostly tablets and smart phones. However, most have a level of independence that does not allow for full, ongoing

use of these tools. So, basic "digital culture" training courses are needed, for most of the elderly hosted in centers, or that are leaving at home, alone, with partner of with a caregiver.

All the interviews have shown how important is the **creation of opportunities for contact** with people, institutions, associations in the area, in general. Also volunteers often play an important role, in creating opportunities for meaningful relationships (above all with bodies and institutions that are outside of the centers). But, nowadays, due to Covid19 emergency, the external activities are really few. In this sense, the activation of a network of volunteers, supported by a computer network that can keep in constant connection the various fragile subjects in a state of isolation.

Digi-Ageing as "connecting network": most of the people would like to join a (virtual) network in the region. This virtual network could positively address the issue of loneliness in later life. The main expectation is connected with the support for sharing issues and sharing experimentation in the field. In general, it would be interesting to share with others the experiments done in the field; so that the effects can be improved or errors corrected.

More in details, it could be a sort of **space for sharing the stories of elders**: sharing with other elders (linking between facilities/associations) or between different generations (linking with people/entities/associations that group people "different" from elders in age).

Isolation, if prolonged, is a great indicator of distress (because humans are "social animals," and need to be with others). A few sporadic moments when the older person expresses a desire to be alone is normal. While a prolonged time in being alone becomes an alarm signal, to be investigated.

The studies also indicate several **signs of loneliness**: less spontaneous initiative; refusal to participate in activities (which, before, were considered pleasant); lack of appetite; poor quality of sleep; irritability and fits of anger; emotional weakness; cognitive deterioration; etc.

Considering that a digital tool to identify loneliness will be developed in the project, some interviewees stated that it would be interesting to acquire a list of the lonely person's interests. Thanks to this, it will be possible to put in contact/share subjects with similar interests, and thus promote their sociability. Another digital tool, to identify loneliness, could be to sort of cut off for an alarm situation, which requires to be handled promptly.

During the Covid19 pandemic, all the interviewees, at different times and in different ways, implemented all the alternative strategies to free meetings with relatives: video calls, telephone calls, interviews with the adoption of measures to prevent contagion. But also different interventions of support for the guest: interview with the psychologist, moments of active listening, proposals for group meetings.

Programs or projects useful for reducing loneliness in old age can be: the senior citizens' club; the service of accompanying people to the weekly market; the organization of the board game day; the service of accompanying people to singing or artistic events; University of third age; projects related

to active aging; projects that involve citizens in the area. In general, anything that can unite people with similar interests.

Another aspect, highlighted by some interviewees, was that of **providing tools**, **with a facilitated interface**, for the independent use of the potential of the network by the elderly (who, notoriously, do not have a high level of knowledge in the field of digital skills). The current urgency is to address the suffering that Covid has caused lonely people. Many participants interviewed have not yet had time to process all that has happened.

Useful (digital) tools to prevent loneliness in old age may concern: skills in the use of digital technology, training in relational skills (how to relate), knowledge of the reality of the context of residential facilities and the type of guests in order to be able to intervene in an appropriate and consistent way to the needs. In general, the pandemic disrupted the way everyone worked. Operators have had to completely rethink their roles in order to focus on basic needs. Fatigue is still being felt and the fear of falling back into the contagion is great.

The main need is to resume normal life inside the house, resume rehabilitation activities and cognitive stimulation of the guests. With the pandemic, everybody has had to reinforce the use of digital technologies (phone-tablet) for communication between residents and family members. However, these tools have their limitations with respect to people with cognitive decline. The pandemic has also restricted the possibilities of contact with people/institutions in the area.

3.4 Key results for Lithuania (by MRU)

Description of the research process in Lithuania

Focus group method was chosen for the qualitative research. The focus group method was used in this study to reveal the experiences of seniors in health promotion, what health promotion services are used by the seniors, what motivates them to promote health promotion, what are the barriers to health promotion.

The interview method was chosen to conduct the research with Group 2 - relatives, as this method allows us to get closer to people's perceptions, meanings, definition of situations and construction of reality (Luobikienė, 2011). A focused structured interview type was chosen for the study.

A qualitative research strategy was chosen for the study. Two focus group discussions were organised to uncover the subjects' experiences of caring for the elderly. 6 professionals and 5 lecturers participated in the focus group discussions. 6 individual interviews were also organised and conducted through online digital platforms.

Informants mention various characteristics of loneliness, such as emotional and social loneliness, personal rejection, not being able to communicate as often as they wish, as well seniors' personal temperament as being extravert or introvert may play important role. Expectation of ideal relationship and lack of common interests may lead to loneliness up to informants as well as pandemic period has increased the level of loneliness of elderlies.

The most important things older people need are more communication, special attention, and participation in various activities.

The main incentive to use ICT in their work, the informants said, is the empowerment of the elderly through ICT, but it is important to have the technological tools and to have a person who is trained to use them and could share their knowledge with elderlies.

In response to the question of **how they deal with loneliness** and what kind of help they get, who they turn to, care staff/social workers identified the challenges of working in the context of providing services to overcome loneliness: heavy workload, extra control by authorities, stopping the activities, lack of help. When referring to how carers deal with loneliness and who they turn to when they need help, they mentioned various activities: having rituals, opportunity to be together, organising leisure time, support of family members, being with friends, etc.

The topic of **how to recognise loneliness** revealed the following possibilities: recognising it from emotions, recognising it from behaviour; recognising it from health (mental and physical). Lonely people can be identified by emotions such as indifference, anger, sadness, boredom, attention demand, longing, willingness to communicate. Sometimes they express loneliness openly – just to say it. Sometimes loneliness may be associated with depression.

Some **methods of preventing loneliness** were identified by the research participants: personal and interpersonal relations, occupational activities, hobbies, and ICT – if it is correctly adapted to physical or psychical person's condition.

The study showed that it is very important to take into account factors such as motivation for change, the age of the employees, and certain conditions, in this case the pandemic, when organising training. When assessing employees' motivation for change, it should be noted that employees may view training with enthusiasm, understanding its need and benefits, but on the other hand, staff can be passive and unmotivated to change and to accept innovation. Motivation to learn can depend on age. The survey data partly reinforces the stereotype that older workers are less inclined to improve their knowledge and skills and less inclined to change and innovate

Participants in the survey indicate that they are **interested in a variety of training topics**: suicide and suicide prevention, communication, Prevention measures, ICT topics. A relevant topic might be the use of technology in the leisure activities of older people. There are mixed views on ICT topics. On the one hand, it is stressed that there is no need to learn about ICT because older people do not use technology much, On the other hand, there are some relevant themes about the ethics of using technology.

A fundamental change during a pandemic is the restriction of human contact. Participants in the study found it difficult to adapt to the restriction of contact and emphasised the continuing need for direct contact because: want to be in a relationship, Live contact is different and gives more emotions, distance is tiring. A lesson that could be learnt from the pandemic timeline is that there is a balance to be struck between the use of IT and face-to-face contact

3.5 Key results for Spain (by Caminos)

Description of the research process in Spain

Asociación Caminos (Spain) carried out 10 interviews with different professionals and non-professionals that are in close contact with people of the third age. Seven of the interviews were carried out though phone, following the questionnaire provided by Hafelekar and recording the call for later transcription, while two interviews were conducted face to face with two workers of "Lux Mundi" centre in Velez-Málaga (Málaga). The interviews were carried out between the 17th of March and the 15th of May 2021 by one staff member of Asociación Caminos on different dates and times, always trying to adapt to the working schedule and free time of the interviewees and respecting the present COVID-19 restrictions.

Asociación Caminos aimed directly at getting in contact with professionals who work with elderly people or deliver training on the subject to other professionals and close family members who were in close contact with an elderly person, usually within a non-formal caregiver role.

Regarding the main findings related to the topic of loneliness in old age, the majority of the professionals can clearly differentiate loneliness from social isolation. The three groups of interviewees define loneliness as a feeling of being a burden, not feeling accompanied or not feeling useful to anyone. Some of the interviewees indicated the existence of a conscious and positive sensation of loneliness.

Social isolation was defined as a lack of communication and exchange with the environment. It was defined as something more tangible, observable, related to direct contact with others and taking part in social life. Some of the interviewees related social isolation to disabilities and to psychological disorders. Many of the interviewees explained that social isolation in elderly people has worsened as a consequence of social isolation during the COVID-19 restrictions.

All of the people interviewed gave great importance to the issue of loneliness in elderly people. Professionals and family caregivers expressed that these situations affect the deterioration of the people they care for, taking a significant toll on their physical, intellectual, and emotional faculties. They also stated that it has more serious consequences on certain vulnerable groups like migrants. The trainers indicated that in the curriculum, the topics of loneliness or social isolation are dealt with but are not worked on, they are simply discussed in depth when talking about topics such as depression or other illnesses.

Regarding **digital tools** (Section A1) in general both caregivers and family members use cell phones, tablets or laptops to make video calls with the elderly; social media (like Facebook) and Zoom. The elderly by themselves tend to use a landline, mobile phone to make phone calls and in some cases the WhatsApp app. The trainers use more digital tools including computers, web pages, blogs, YouTube account, etc. Some try to teach older people how to use cell phones, send SMS, WhatsApp, emails and Facebook.

Regarding **networks and external help**, caregivers of the elderly try to create activities that stimulate social participation of elderly people. They believe that it is essential to accompany, talk to the elderly, walk together, understand them, and give them confidence so that they trust the caregiver. They mention the importance of small gestures such as saying good morning, approaching them so that they see that you are there, touching their arm while you talk to them, addressing them by name, among other things. They also mention the importance of know their tastes, their personal history. Family members of elderly people use resources like watching videos and doing activities with their older relatives (i.e., making puzzles).

Some of the trainers mentioned **the importance of peer-support for elderly people** that are not completely independent. They mentioned cohousing and co-living as an alternative to residential care, also including social clubs as a means to create networks.

In regards to external help, the interviewees mentioned past activities like intergenerational meetings, animal-assisted therapy and art classes offered by external organizations. Also, some family members organized events (i.e., birthday parties) for their elderly relatives and, in occasions, external volunteers participated and offered support in different events. Many of these external resources ceased to exist since the COVID-19 pandemic began. Some family members mentioned that the Government of Andalucía offers Tele-assistance to elderly people.

In terms of digital tools, some caregivers and trainers make use of applications such as Instagram and Facebook to promote the workshops to be carried out. They also use Facetime and WhatsApp to keep in contact. Elderly people themselves tend to not use these digital tools with some exceptions.

In reference to the Digi-Ageing project and tool, the interviewees believe that it could be a good way to relate to other people in their situation and it is an easy way to talk to people who put themselves in their shoes. They also mentioned a potential chat room for caregivers and the elderly people themselves. Some consider that projects like this one should address issues such as suicide, since in senior centres there are a significant number of these cases.

Concerning the identification of loneliness, most interviewees expressed that they find it easy to detect, though they usually have problems to deal with it. Many of the interviewees mentioned the following signs of loneliness in elderly people: neglection of appearance and hygiene, lack of appetite, decreased social behavior and lack of interest towards activities. They also can identify it by observing the persons gestures, tone of voice, etc. Regarding factors related to loneliness, they mention grief, health issues, physical limitations, psychological problems, poor family relations, the fact of living alone and a weak social network. The trainers mentioned that loneliness in many cases is related to psychological disorders like dementia.

In general, there is no knowledge of digital tools that can be used to identify loneliness, but the interviewees would be interested on the proposal of the Digi-Ageing project of creation a tool. Some

of them talked about the usefulness of a "quantitative" tool to measure loneliness and some techniques to know how to deal with it.

When asked about **the prevention of loneliness**, the caregivers talked about carrying out meaningful activities with elderly people like listening to music that is important to them and that serves as a way to talk about important events. They also mentioned the importance of having hobbies (cooking, sewing, etc.), goals and engaging in daily activities related to their peers have on their feeling of loneliness. In any case, the main goal is always to maintain social contact through different means.

Regarding the contribution of the community, the interviewees all agree that society has a negative concept of elderly people. They mentioned that society can contribute through intergenerational inclusive activities, neighborhood activities and with small details like invitations, phone calls or visits. It is also important to include elderly people in activities where they can help other people and, this way, feel more useful to society. Following the topic, they talk about the Adopta un Abuelo program, activities for elderly people created by local associations, some of the projects of the Red Cross, activities of Haruna association and the town halls' Tele-assistance service.

The trainers reported that **loneliness prevention is not addressed directly in their trainings**, though it is somehow included in an indirect way. In relation to digital tools to prevent loneliness, the participants do not know any or do not use them. Some of the caregivers and the trainers digitalized their activities through means like WhatsApp during the COVID-19 lockdown. When asked about their needs on the topic of loneliness prevention regarding the Digi-Ageing project, they expressed that they would like some kind of tool that offers optional enjoyable activities and that could assign tasks to elderly people. It should also be a means of expression and communication between elderly people and their peers or caregivers.

Regarding **education and training on loneliness**, the great majority of the participants do not have specific training on the subject. The trainers explained that they do not offer courses specifically aimed at treating loneliness and that the subject is only mentioned when talking about psychological disorders like depression. Some of the participants showed interest in receiving further training on loneliness and other topics (empathy, accompaniment, etc). Regarding a digital tool on the topic, they would like to have an application that provides advice when dealing with loneliness.

All of the interviewees reported being greatly affected by the COVID-19 situation. Caregivers working with elderly people reported being able to observe a clear deterioration of their patients (physical, psychological and social) and having big difficulties adapting their job to the situation: having to work from a distance, digitalizing activities, maintaining their routine and personal problems. Family members of elderly people reported that they have had a hard time because of being worried about their elderly familiars and because of issues when trying to contact them related to social restrictions. This situation as also caused interpersonal problems with their elderly familiars because of misunderstandings, like the elderly person believing that he/she is being

ignored or lied to. The trainers reported personal issues and economic problems because of losing their job or having their training hours cut in relation to the pandemic.

Most of the people interviewed showed a **great interest towards the Digi-Ageing project**, highlighting the importance of treating loneliness and of remembering the issues of elderly people (whom they define as the "forgotten generation"). They believe that the project and its outputs should be used by elderly people, family members and professionals and suggest that it should be introduced to younger generations.

4 Glossary of terms for the Digi-Ageing project

Term	Definition/Description
Active Ageing	Active ageing is the process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age. Active ageing applies to both individuals and population groups. It allows people to realize their potential for physical, social, and mental well-being throughout the life course and to participate in society according to their needs, desires and capacities, while providing them with adequate protection, security and care when they require assistance. SOURCE: Active Ageing: A Policy Framework. A contribution of the World Health Organization to the Second United Nations World Assembly on Ageing, Madrid, Spain, April 2002. http://whqlibdoc.who.int/hq/2002/WHO_NMH_NPH_02.8.pdf
	Active ageing is about adjusting our life practices to the fact that we live longer and are more resourceful and in better health than ever before, and about seizing the opportunities offered by these improvements. In practice it means adopting healthy life styles, working longer, retiring later and being active after retirement. SOURCE: "New Paradigm in Ageing Policy", European Commission, http://ec.europa.eu/employment_social/soc-prot/ageing/news/paradigm_en.htm
Ability to Benefit	The point at which an adult qualifies for selected programs or services based on achievement results. Assessments approved by OAEL may be used to establish an "ability to benefit" and may result in an individual's acceptance or rejection for programs or services based on assessment scores. SOURCE: Adult Education, Glossary, http://www.doe.virginia.gov/instruction/adulted/glossary.shtml
Adult Education	 Adult Education services or instruction below the post-secondary level for individuals: who have attained 16 years of age; who are not enrolled or required to be enrolled in secondary school under State law; who lack sufficient mastery of basic educational skills to enable them to function effectively in society; who do not have a secondary school diploma or its recognized equivalent, and have not achieved an equivalent level of education; or (e) who are unable to speak, read, or write the English language. SOURCE: Glossary of Adult Education Terms, http://www-tcall.tamu.edu/docs/04esguide/glossary.htm
Adult Basic Education (ABE)	Programs and services that target adults functioning below the ninth-grade level based on an approved assessment. SOURCE: Adult Education, Glossary, http://www.doe.virginia.gov/instruction/adulted/glossary.shtml
Age Discrimination	Inappropriate behaviour (social pressure, restriction of rights) to people of all ages (young, middle and older) based on age stereotypes. SOURCE: Mikulionienė S. 2011. <i>Social gerontology.</i> Textbook. Vilnius. [Social gerontology: textbook]
Age Norms	Age-related behavioural rules, expectations, and standards governing the interaction of people. Age norms describe roles and behaviour, which are (not) acceptable and (un)desired for people of certain age.

content/uploads/2009/02/d12-text-analysisreport2.pdf

The term "middle age" was a concept popularised in the 1960's to indicate a grey area between adulthood (30-40 years old) and retirement (affecting those 65 years and older). "Extended middle age" is now the term commonly used to indicate a continuation of this period but a change in circumstances (e.g., retirement). During extended middle age, the main physical and mental abilities remain unaltered though the person is ageing and gradually forced into the role of the senior citizen. As such, he or she is better profiled in terms of desired activity patterns, job opportunities, Middle Age desired life habits, desired conditions rather than medical and social needs. The "fourth age" applies to older senior citizens, people in their eighties and nineties. In this period, practically all people show substantial losses in physical mobility and cognitive functioning. **SOURCE:** "Ethics of e-Inclusion of Older People," Senior Discussion Paper No. 2008/01, April, 2008. http://www.cssc.eu/public/Ethics%20of%20e-Inclusion%20of%20older%20people%20-%20Bled%20%20Paper.pdf Is "an individual's perception of his or her position in life in the context of the culture and value system where they live, and in relation to their goals, expectations,

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and value system where they live, and in relation to their goals, expectations, standards and concerns. It is a broad ranging concept, incorporating in a complex way a person's physical health, psychological state, level of independence, social relationships, personal beliefs and relationship to salient features in the environment." (WHO, 1994). As people age, their quality of life is largely determined by their ability to maintain autonomy and independence.

SOURCE: Active Ageing: A Policy Framework. A contribution of the World Health Organization to the Second United Nations World Assembly on Ageing, Madrid, Spain, April 2002. http://whqlibdoc.who.int/hq/2002/WHO_NMH_NPH_02.8.pdf

Social Exclusion

Social exclusion is a social process, built on social inequalities and leading to the marginalisation of individuals and groups as regards societal goals. Social inequalities (related to a series of factors: gender, ethnicity, age, education, employment, income, professional status, housing, family structure, disability, geographical location, etc.) are the basic roots of social exclusion. Exclusion is defined in relation to a goal: in the case of this project, the development of the information society / knowledge society (digital exclusion or e-exclusion). Exclusion occurs when individuals or social groups are left behind or do not benefit from equal opportunities to achieve societal goals.

SOURCE: Analytic Framework - elnclusion and eAccessibility Priority Issues, elnclusion@EU Project: Strengthening elnclusion & eAccessibility Across Europe, Deliverable 1.1, October 2004.

 $http://www.empirica.com/themen/einclusion/documents/elnclusion_Analytic-framework.pdf\\$

The process which ensures that those at risk of poverty and social exclusion have the opportunities and resources necessary to participate in economic and social life, securing a standard of living that is considered acceptable in the society in which they live.

SOURCE: Social Protection, Social Inclusion Glossary: Key terms explained, European Commission,

Social Inclusion

 $\verb|http://ec.europa.eu/employment_social/spsi/docs/social_inclusion/glossary_en.pdf|\\$

Social inclusion is not only the symmetric counterpart of social exclusion, aiming at including those who are at risk of exclusion. The process of social inclusion relies on three dimensions: (1) overcoming the disadvantages resulting from social inequalities, in order to avoid exclusion processes; (2) harnessing the opportunities offered by the targeted societal goals, in order to reduce existing inequalities and improve the quality of life in society; (3) fostering participation and empowerment in upcoming societal

	processes, in order to improve individual and collective expression, civic commitment and democratic participation.
	SOURCE: Analytic Framework - eInclusion and eAccessibility Priority Issues, eInclusion@EU Project: Strengthening eInclusion & eAccessibility Across Europe, Deliverable 1.1, October 2004.
	http://www.empirica.com/themen/einclusion/documents/eInclusion_Analytic-framework.pdf
Social Gerontology	Social Gerontology is a branch of gerontology, studying "social aspects of ageing". It combines the knowledge on ageing (process), age (criteria) and older persons (population category) produced by different social sciences: sociology, demography, economics, social policy, social work, education science, gerogogics, etc. SOURCE: Phillipson, Chris. Ageing. Cambridge: Polity Press, 2013, p.5.
Vulnerable Groups	Groups that experience a higher risk of poverty and social exclusion than the general population. Ethnic minorities, migrants, disabled people, the homeless, those struggling with substance abuse, isolated elderly people and children all often face difficulties that can lead to further social exclusion, such as low levels of education and unemployment or underemployment. SOURCE: Social Protection, Social Inclusion Glossary: Key terms explained, European Commission, http://ec.europa.eu/employment_social/spsi/docs/social_inclusion/glossary_en.pdf
Third and Fourth Age	In the sociological tradition third and fourth ages are "phases of the life course identified in terms of functions and roles". The third age is "the period for personal achievement and fulfilment". The fourth age is "a time of dependence, decrepitude and death". SOURCE: Phillips, Judith; Kristine Ajrouch, and Sarah Hillcoat-Nalletamby. Key concepts in social gerontology. London: Sage Publications, 2010. p. 213; 215.

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ITALY

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7 Annexes

7.1 Brochure: "LONELINESS coping together" (Case Studies)

DIGI-AGEING

OVERCOMING LONELINESS

PROJECT ID 2020-1-AT01-KA202-078084

ERASMUS+ KA2 STRATEGIC PARTNERSHIPS
START DATE 01-10-2020
END DATE 31-07-2023

COORDINATOR

Hafelekar Unternehmensberatung Schober GmbH www.hafelekar.at

PARTNER

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