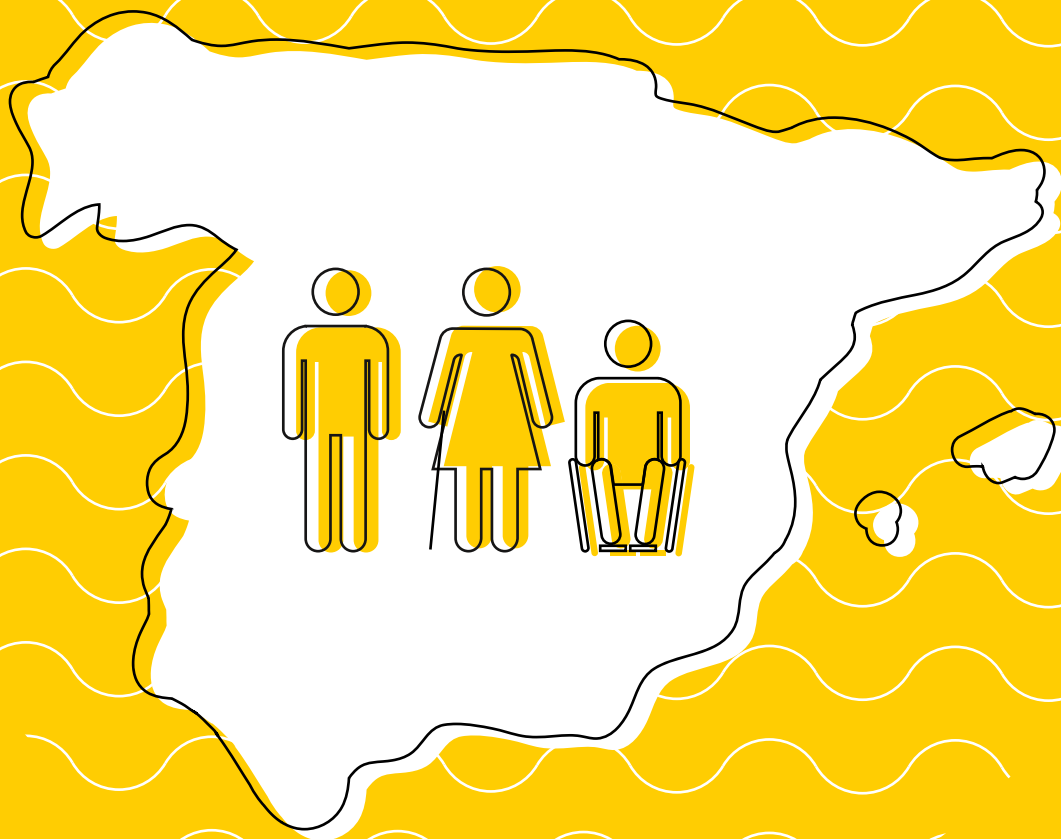


The cost of loneliness in Spain



Study promoted by the Fundación ONCE
in collaboration with Nextdoor

Observatorio Estatal de la Soledad No Deseada (SoledadES) (State
Loneliness Observatory)

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1.

Main results

Loneliness has a negative impact on people's physical and mental health and quality of life, but it also has significant economic effects. This study **aims to measure the costs of loneliness in Spain**. This is the **first study of this type** carried out in our country.

On the one hand, the study measures **healthcare costs**, both in relation to the use of healthcare services and regarding the use of medication. It also measures the economic costs in terms of **productivity losses** related to the reduction in working time that loneliness causes in our country.

The study also measures the **well-being losses** resulting from loneliness, related to premature deaths, and loss of quality of life.

Thus, it is estimated that loneliness represents a **total cost of 14 billion euros per year** in our country. This represents **1.17% of Spain's Gross Domestic Product (GDP)** by 2021.

Specifically, the costs of **use of healthcare services amount to more than 5.6 billion euros** per year, and the costs of drug consumption are **495.9 million euros**. Together, healthcare costs are equivalent to **0.51% of GDP**.

In addition to healthcare costs, it is estimated that the costs **associated with productivity losses amount to more than 8 billion euros per year**, representing approximately 0.67% of GDP.

In terms of intangible costs, loneliness generates a **reduction in quality of life not associated with mortality equivalent to more than 1 million QALYs (Quality Adjusted Life Years)**. A QALY is **one year of life in good health**. In addition, **premature deaths would equate to an annual loss of nearly 18,000 QALYs**. Thus, the total loss that loneliness produces in people's quality of life represents **2.79% of the total healthy life years** of the Spanish population over 15 years of age.

Sample and methodology

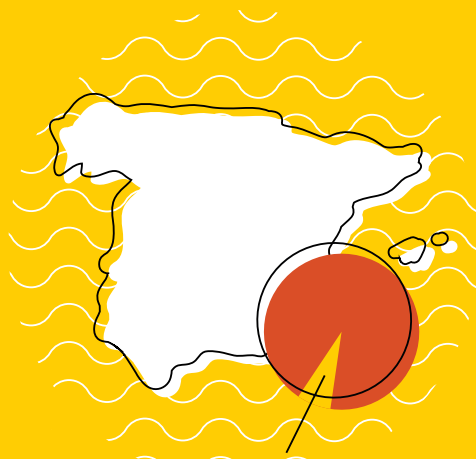
The estimation of the costs associated with loneliness was based on a survey aimed at obtaining the prevalence of loneliness among the Spanish population over 15 years of age (by sex and age). For this purpose, a specific questionnaire was developed with questions on loneliness, its causes, as well as the information necessary for the estimation of costs. For this purpose, 4,004 individuals representative of Spanish society by sex, age, and size of habitat were contacted.

To estimate the costs of loneliness, matching and regression techniques have been used, estimating the differences between lonely and non-lonely people in relation to the consumption of medication, use of healthcare services, quality of life and reduction of working time.

With regard to the calculation of costs due to loss of quality of life, as these are intangible costs, the QALY (Quality Adjusted Life Years) measure is used. QALY is a measure of health, which considers both quantity and quality of life, understood as years gained with quality, produced, or avoided, combined with years of life gained or lost, with respect to a given state of healthcare, generating a life expectancy of the years remaining to the individual.

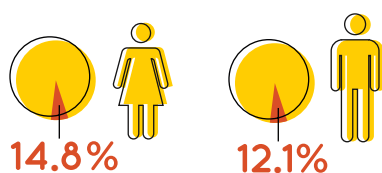
2.

Origin of loneliness in Spain



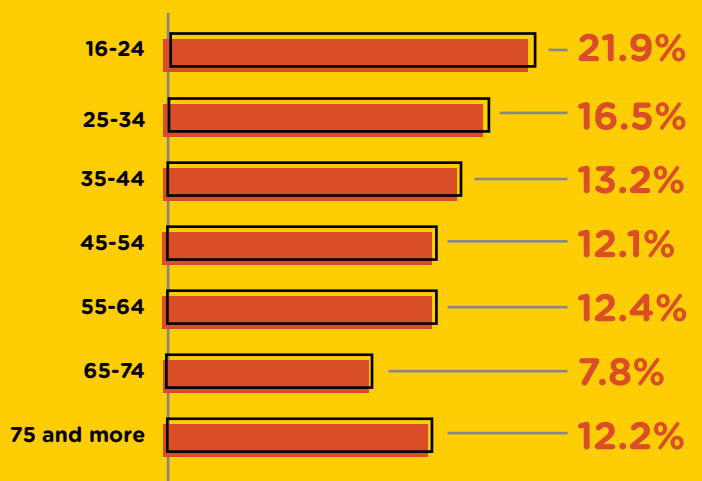
Loneliness affects **13.4%** of the population in Spain

Women suffer more from loneliness than men

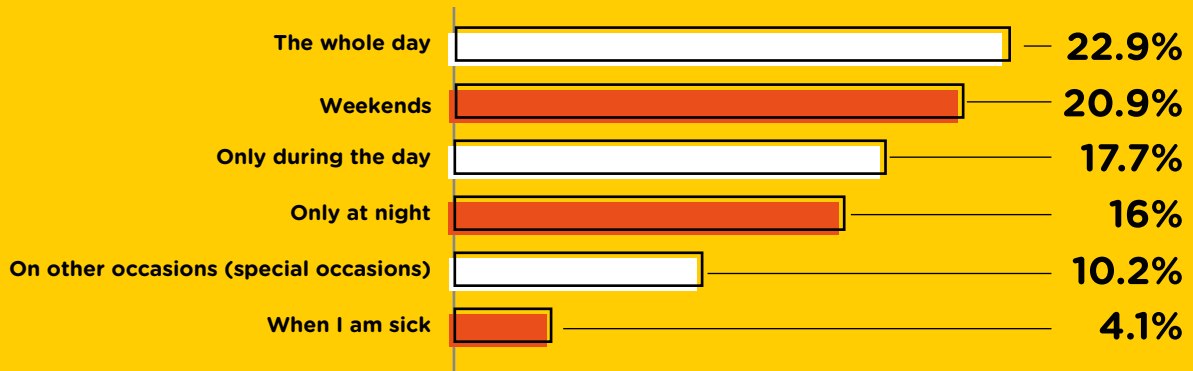


By age, **young people experience loneliness the most, at 21.9%.**

In the following age brackets, loneliness decreases to **around 12%**. The 65-74 age group suffers the least from loneliness. However, among **people aged 75 and over, loneliness has risen again to 12.2%.**



Times where you feel most lonely



Regarding the frequency of loneliness, **22.9% of the people interviewed feel lonely the whole day**. Almost 20.9% perceive this feeling of loneliness at weekends.

On average, **people experiencing loneliness have been in this situation for about 6 years**.

3.

The **causes** of loneliness

The causes of loneliness are varied. Seventy-nine point one per cent of the causes of loneliness are related to external causes, the most important being **“living alone or lack of family or social support” (57.3%): the distant residence of their relatives (11.9%)**; no longer living with the people they used to live with (10.5%); and lack of understanding by the people around them (8.2%).

Labor causes represent 11.1% of the total causes and overworking is the main labor cause of their loneliness (6.2%). The last two groups of external causes refer to reasons of **isolation due to environment (8.6%) and to being a caregiver (2%)**.

With respect to internal or intrinsic causes, **difficulty in interacting with others accounts for 12.7%** of the total causes reported, and loneliness **due to poor health accounts for 6.4%**. Of the latter, 1.4% identify that their loneliness is motivated by having a disability.

Main Causes of loneliness

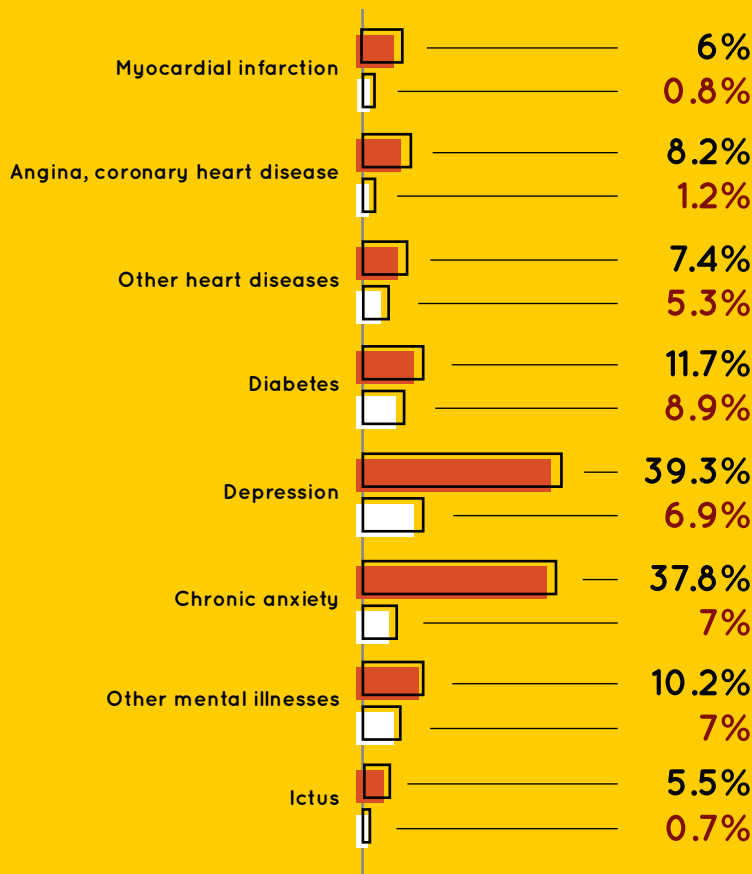
EXTERNAL CAUSES	79.1 %
1. Living alone or lack of family and social support	57.3 %
My family lives far away _____	11.9 %
I am no longer living with the people I lived with _____	10.5 %
The people around me do not understand/value me _____	8.2 %
I lack company _____	7.6 %
The person I had a close relationship with passed away _____	6.4 %
I have conflicts with my family _____	5.9 %
I live alone most of the time _____	3.3 %
I have no children, partner, or family _____	2.7 %
I have little contact with my family _____	0.8 %
2. Labor causes	11.1 %
I have a lot of work and I have no time for pleasure _____	6.2 %
Due to the loss/change of my work, or my retirement _____	4.3 %
I have been harassed at work _____	0.6 %
3. Isolation due to environment	8.6 %
I am geographically isolated _____	4.3 %
I am isolated due to the pandemic _____	2.5 %
My financial situation is bad _____	1.8 %
4. Caring for other people	2.1 %
I am a carer for a dependent person _____	2.1 %
INTERNAL CAUSES	19.1 %
1. Difficulty interacting with others	12.7 %
I have difficulty interacting with others _____	12.7 %
2. Poor personal health	6.4 %
Due to my physical/mental health _____	4.9 %
I have a disability _____	1.4 %
OTHER CAUSES	1.8 %

4.

Loneliness and healthcare

Compared to the population without loneliness, **people experiencing loneliness have a higher prevalence of diseases.** This is most visible in **depression, chronic anxiety, and heart disease.**

**Loneliness-related diseases
(in the last 12 months) (%)**

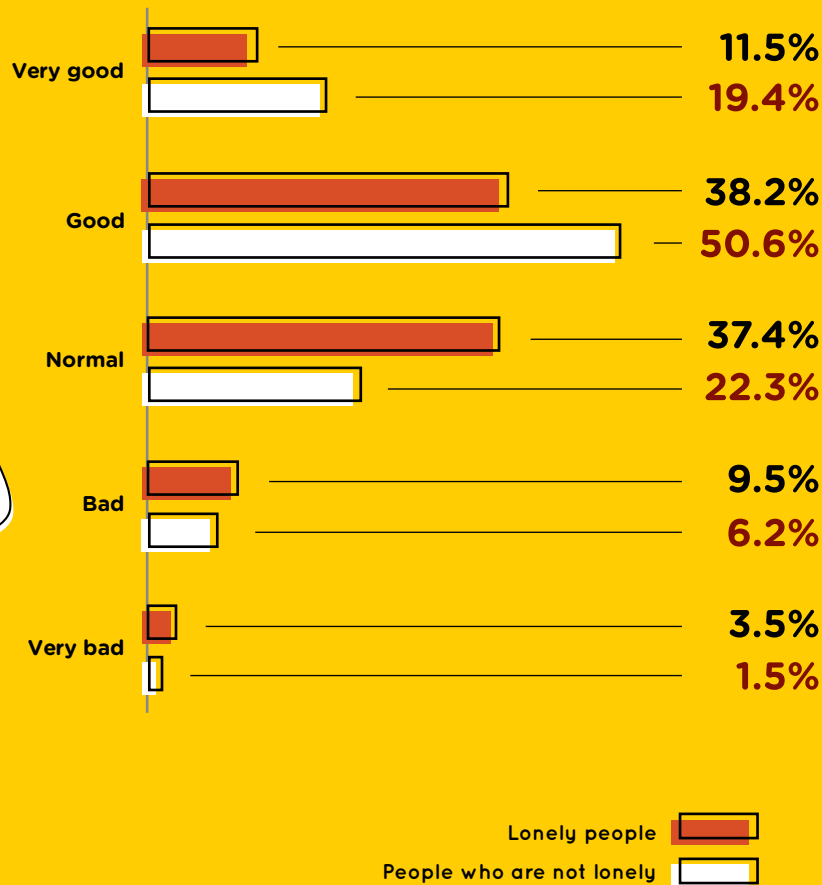


Lonely people 

People who are not lonely 

Moreover, **the perception of their state of healthcare and quality of life is worse** among people in loneliness than among the population who do not report feeling this way.

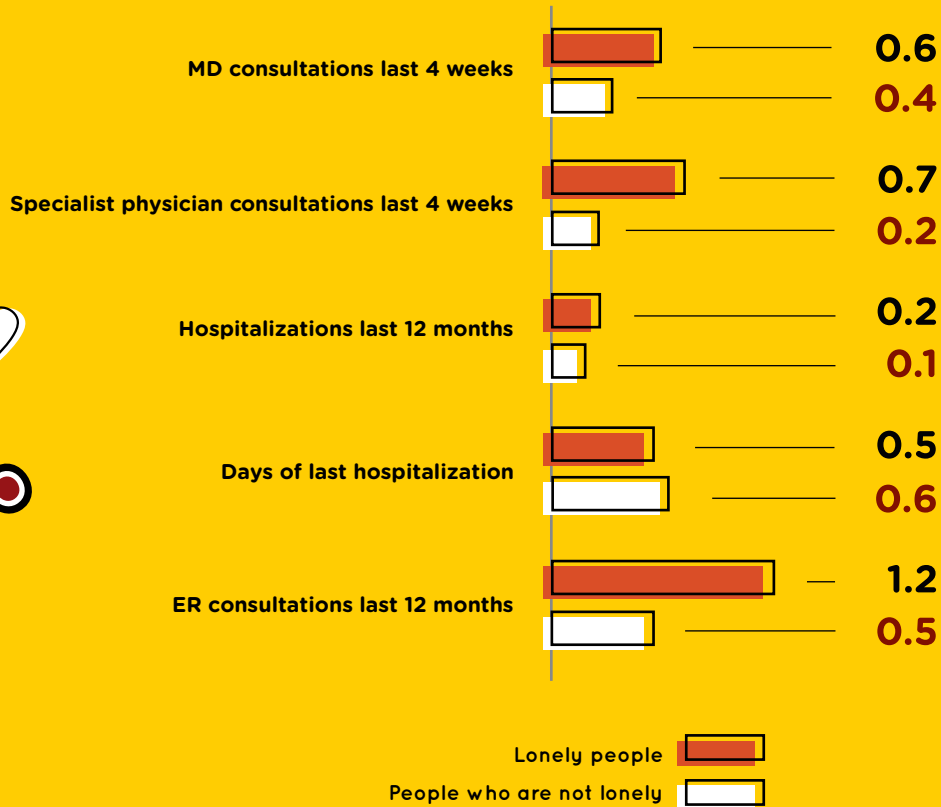
Self-perception of health



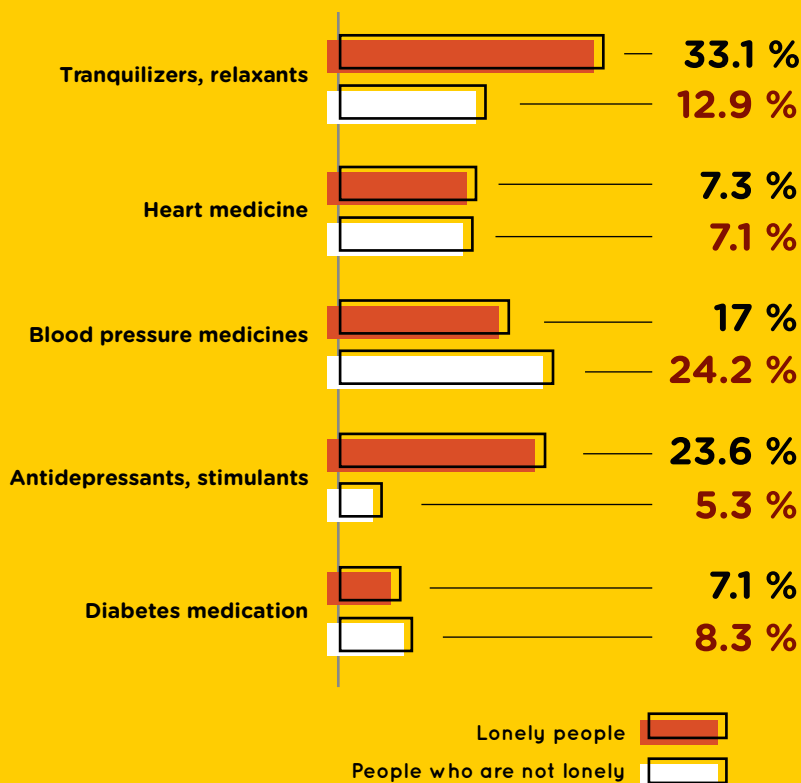
Similarly, **people experiencing loneliness are more likely to use healthcare services.** The differences observed in **consultations with specialist physicians and ERs are noteworthy.**

In addition, they **consume more medication** prescribed for illnesses related to their situation of loneliness, especially **“tranquilizers, relaxants”** (33.1% vs. 12.9%) and **“antidepressants, stimulants”** (23.5% vs. 5.3%).

Use of medical services (average)

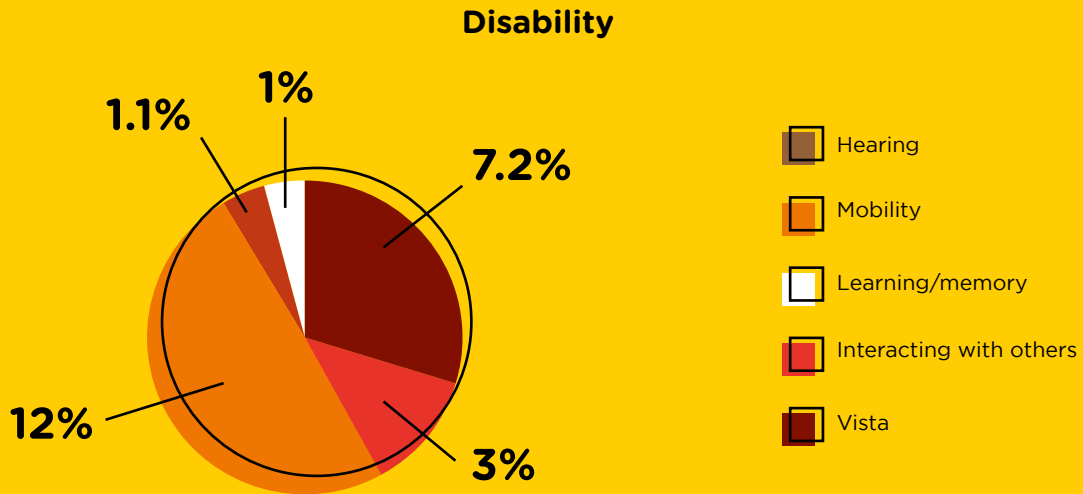


Use of medication (last 2 weeks)



Disability and limitations

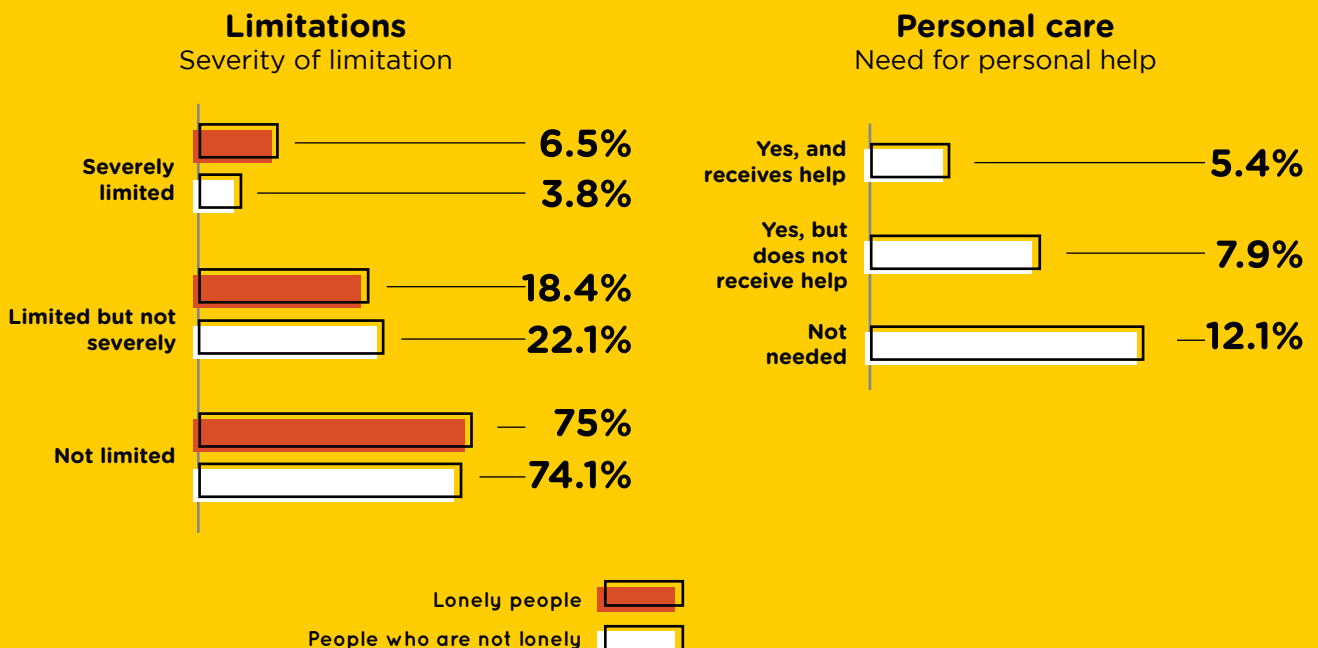
Almost 20.8% of people experiencing loneliness state that they have some kind of disability, mainly impaired mobility and vision.



Around 25.4% of people experiencing loneliness reported having a limitation during the last 6 months in performing daily living activities (washing, dressing, eating, etc.), similar to that of people who do not experience loneliness. However, **people experiencing loneliness present a higher level of severity**: while 6.5% of people with limitations of people with loneliness state that they are severely limited, this percentage is reduced to 3.8% in the group of people who do not feel lonely.

Only 5.4% of people who feel loneliness reported receiving some help with daily living activities.

On average, this help is received 4 days a week.

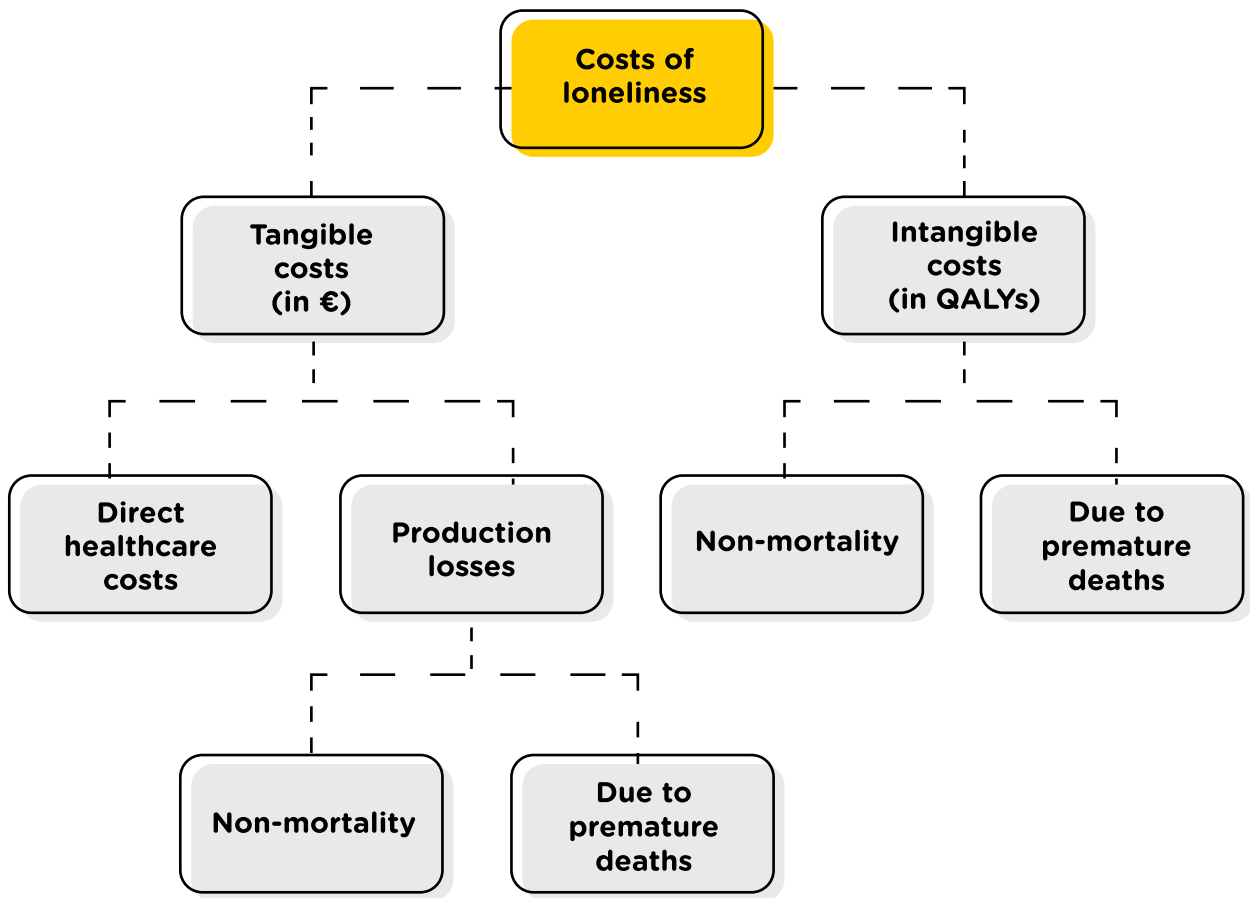


5.

The **cost** of loneliness

Organizations working in the care of people who are unaccompanied by loneliness, as well as studies carried out, highlight the **multiple effects of loneliness on different dimensions of people's lives**. Loneliness has a negative impact on mood, satisfaction of vital needs, relationship with the environment, access to community support services, security and, ultimately, on their quality of life.

Moreover, loneliness **is a risk factor for mental health**, for pathologies such as depression and anxiety, among others. In turn, loneliness is also **a risk factor for physical health**, favoring, for example, hypertension and cardiovascular diseases. Research also confirms a **higher risk of premature death** among people who feel lonely.



Direct tangible costs are healthcare costs directly related to the health problem (costs of primary and specialized care consultations, hospitalization, treatment, consumption of medication, etc.). Indirect costs refer to the **productivity losses associated with the pathologies and premature death** that loneliness causes. Tangible costs (direct costs and productivity losses) are presented in **monetary units**.

Intangible costs refer to the **reduction in quality of life** due to the physical and emotional suffering experienced by the person experiencing loneliness. Intangible costs are presented in **Quality Adjusted Life Years (QALYs)**. A QALY is a measure of health that measures both losses in *Healthcare-Related Quality of Life (HRQoL)* and reductions in life expectancy.

Methodology for calculation

The methodology used is the one commonly used in cost-of-illness studies to estimate the social costs of risk factors, such as loneliness.

Matching and regression techniques have been used to estimate the differences between lonely and non-lonely people in terms of use of healthcare services, consumption of medication, quality of life and reduction of working time. For the estimation of the costs associated with premature deaths, the fractions of deaths that are attributable to loneliness have been calculated using the Relative Risks estimated in survival studies.

The study adopts a prevalence approach, estimating the costs generated by loneliness in the year 2021, regardless of when the feeling of loneliness began.

5.1

Direct healthcare costs

People experiencing loneliness **show a higher use of healthcare services** than the population that does not suffer from loneliness, with more visits to specialist physicians and a greater use of emergency services.

In addition, people experiencing loneliness consume more **“tranquilizers, relaxants”, “anti-depressants, stimulants”** and **“heart medicines”** than people who do not experience loneliness.

In monetary terms, the annual direct healthcare care costs due to the use of healthcare services are **5.6 billion euros. The annual expenditure on medicines due to loneliness is almost 495.9 million euros.**

In total, the annual direct healthcare care costs **amount to a total of 6.1 billion euros¹.**

Direct healthcare costs associated with loneliness



Frequency of healthcare services

€5,605,587,980

MD consultations — **€1,018,317,735**

Specialist consultations — **€3,880,573,565**

Hospital stay — **€110,089,911**

ER consultation — **€596,606,770**



Medication

€495,852,783

Tranquilizers, relaxants — **€158,591,589**

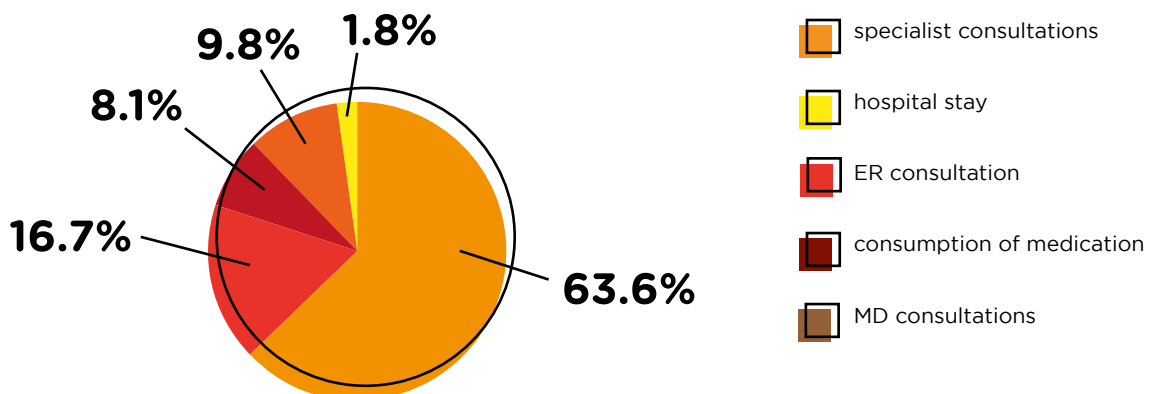
Heart medicine — **€39,199,699**

Antidepressants, stimulants — **€298,061,495**

Total healthcare cost

€6,101,440,763

Scale relative to the healthcare costs of loneliness by type of expense



¹ All costs in this executive summary refer to the baseline scenario. For details of all cost estimates in the optimistic and pessimistic scenarios read the full report.

5.2

Costs due to production losses

Loneliness also **causes significant costs due to production losses**. We distinguish between production losses non-mortality production losses and production losses due to premature deaths.



Non-mortality production losses

Non-mortality production losses estimate production losses due to reduced working time (less full-time employment and more part-time jobs). Thus, in total, **production losses caused by loneliness are estimated at 7.8 billion euros per year.**

Production losses due to premature deaths

The literature shows evidence of a close relationship between loneliness and premature mortality.

A total of 848 premature deaths (511 men and 337 women) **associated with loneliness** have been estimated for 2019.

Using sensitivity analysis, **these deaths would result in a loss of 6.707 potential years of productive life. This corresponds to an estimated cost in lost productivity of more than 191.2 million euros.**

Methodology

For the estimation of premature deaths (also called “avoidable deaths”) the so-called Attributable Risk Fraction (ARF) has been calculated. This concept refers to the proportion of deaths that can be attributed to loneliness.

Once the premature deaths have been estimated, the future production losses derived from them have been calculated, based on the estimate of the gross wage bill that the individual would cease to receive from the time when the death occurs until the time when he or she should have left the labor market.

5.3

Intangible costs due to **loss of quality of life**

Intangible costs refer to the **loss of well-being as a consequence of being in a situation of loneliness**. The measurement of this loss of quality of life is not given in monetary terms, but **in QALYs**. A QALY is one year of life in good health.

Quality of life losses include health-related losses, such as limitations in activities of daily living, pain, lack of vitality, depression, etc. This is how the loss of quality of life caused by loneliness is calculated.

The analysis of intangible costs due to loss of quality of life shows that during the year **2021 approximately 1 million QALYs²** were lost in Spain, equivalent to **2.79% of the total healthy life years** of the Spanish population over 15 years of age.

5.4

QALY losses due to premature deaths

The **intangible costs of premature deaths** were calculated based on the potential years of quality-adjusted life that will be lost on average, taking into account the survival rates and the Health-Related Quality of Life (HRQoL) experienced on average by the Spanish population.

Thus, **the QALYs lost due to premature deaths associated with loneliness are estimated to be 17.9 thousand QALYs**. 62% of this corresponds to men.

6.

Conclusions

Loneliness is a **major problem** affecting many people in Spain. In addition to the negative effects on people's quality of life, **loneliness entails very significant economic costs.** These costs mainly affect the healthcare system, due to the increased use of healthcare services and consumption of medication, and the productive system, due to losses in productivity, human capital and, in short, a reduction in the generation of wealth.

SoledadES believes that it is necessary for all **levels of government to make the fight against loneliness a priority on their policy agenda**, providing coordinated responses with cross-cutting measures and prioritizing those aspects that have the greatest impact on people's quality of life and the greatest economic consequences. Policies should also pay **special attention** to those **groups most vulnerable** to loneliness, **such as disabled people.**

Loneliness is an issue that concerns society as a whole, as it is closely related to social relations, coexistence, mutual help between people, good neighborly relations, primary solidarity, and the social fabric. Consequently, together with the unavoidable commitment of governments, combating loneliness **requires the awareness and active involvement of society as a whole**, not only of social initiative organizations, but also of the business community and citizens.



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<https://www.soledades.es/>