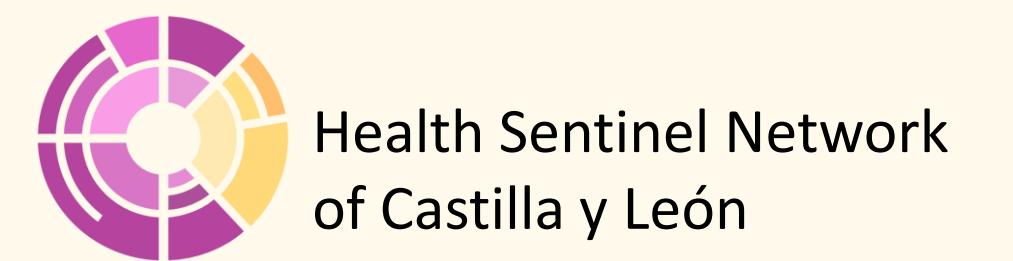


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Major health problems, such as dementia or other mental illnesses affect significantly the QoL of LLI. However, correctable physical conditions such as quality of vision are closely associated with poor QoL, indicating scope for clinical and social improvement.

## Background

The increasing life expectancy of the population is accompanied by an increase in the number of long-lived individuals (LLI) whose quality of life (QoL) and independence for the activities of daily life represent a health and social challenge. Several studies have highlighted the importance of comorbidities in aging population, such as cognitive impairment, cardiovascular disease, degenerative illnesses, or cancer, but few of them have described the health status or factors associated with poor QoL.

The study 'Genetic, environmental and lifestyle factors associated with longevity' (LONGECYL study) aims to describe the health status of a representative population of nonagenarians-centenarians from the region of Castile and Leon (Spain).

## Methods

Genetic, clinical, and epidemiological data were collected in a sample of 759 LLI aged 95 and over in 2019. QoL was assessed using the EQ-5D-3 and the index was categorized as <0.5 or ≥0.5. Explanatory variables were recorded using a standard questionnaire and the electronic medical record. Odds Ratio (OR) and 95% confidence intervals were estimated in a logistic model.

## Results

Perceived health status, quality of life by sex and age group (N=759)

	Sex		Age			Total
	Male	Female	< 98	98-99	100+	
<b>Perceived health status</b>						
Excellent	6.7	4.5	4.0	9.1	9.4	5.1
Very good	12.5	15.6	13.1	16.4	30.2	14.8
Good	46.6	43.4	46.5	38.2	32.1	44.3
Not too bad	27.4	27.8	28.0	30.9	17.0	27.7
Bad	4.8	7.4	7.4	3.6	5.7	6.7
Unknown	1.9	1.3	1.0	1.8	5.7	1.4
<b>Quality of life index (0-1)</b>						
0.75 +	22.1	8.0	12.4	10.9	7.5	11.9
0,50 - 0,74	35.1	33.8	33.1	33.6	47.2	34.1
0,25 - 0.49	15.4	14.0	15.6	12.7	3.8	14.4
< 0,25	27.4	44.3	38.9	42.7	41.5	39.7

## Results continued

Factors associated with quality of life and dependency of the LLIs

	Overall quality-of-life index (from 0 to 1)				p*
	0.75+	0.50- 0.74	0.25-0.49	<0.25	
All	11.9	34.1	14.4	39.7	
Sex					<.0001
Male	22.1	35.1	15.4	27.4	
Female	8.0	33.8	14.0	44.3	
Age at inclusion in the study					0.1578
Less than 98	12.4	33.1	15.6	38.9	
98-99	10.9	33.6	12.7	42.7	
100 and over	7.5	47.2	3.8	41.5	
Lifetime residence category					0.0322
Rural	10.2	31.5	15.6	42.6	
Urban	14.4	38.0	12.8	34.8	
Unknown	7.7	30.8	7.7	53.8	
Current residence					<.0001
At home with their family	13.9	30.7	16.2	39.2	
At home alone	20.7	45.0	14.4	19.8	
At their family's home	7.4	40.2	13.9	38.5	
In a nursing home	6.7	29.5	11.4	52.4	
Unknown	14.3	42.9	28.6	14.3	
Marital status					0.1149
Single	9.0	34.3	19.4	37.3	
Married / partner	21.4	30.1	15.5	33.0	
Widowed	10.7	35.1	13.6	40.6	
Separated / divorced	.	100.0	.	.	
Unknown	.	11.1	11.1	77.8	
Type of caregiver (simplified)					<.0001
No permanent caregiver	38.5	53.8	5.1	2.6	
Partner	35.3	23.5	23.5	17.6	
Children	13.6	36.3	14.2	36.0	
Paid caregiver	4.1	30.6	20.7	44.6	
In a nursing facility	6.7	29.5	11.4	52.4	
Unknown	10.5	36.8	21.1	31.6	
Cognitive impairment					<.0001
No	22.3	44.6	12.4	20.7	
Mild	8.6	41.4	16.1	33.9	
Moderate or severe	0.9	12.8	15.6	70.6	
Unknown	4.9	34.1	14.6	46.3	
Difficulty with near vision					<.0001
Yes	6.1	28.2	17.9	47.8	
No	18.3	42.0	12.1	27.5	
Unknown	2.4	12.2	4.9	80.5	
Difficulty with distance vision					<.0001
Yes	8.0	24.0	14.9	53.1	
No	15.4	42.6	15.2	26.7	
Unknown	3.2	17.5	6.3	73.0	

## Conclusions

Sixty-four point two percent of LLIs perceived their health as good, very good or excellent. The QoL improved with age and was higher in men. Not having cognitive deficits, having good near and far vision, and not suffering from nervous system or mental illnesses were positively correlated with a better quality of life.