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# How to Undertake Aging in a Healthy Way: Changes and Opportunities

**The topic:** Promotion and prevention.

**Contribution to the discipline:** The increasing population aging brings up to health professionals, especially to community nursing, the need to know and develop the factors that have an impact on the positive development and well-being of elderly people. The present study provides a faithful picture of the training needs and interests perceived by the elderly adults in Mataró. From these results, nursing can plan interventions which can be implemented from primary care centers, based on the interests of the target population, with a greater guarantee that they will improve the follow-up of health and quality of life guidelines to cope with aging in a healthier way.

## ABSTRACT

**Objective:** To know the socio-demographic characteristics of the elderly adults (60-70 years), of the population of Mataró (Barcelona), and their relationship with the knowledge degree and training needs perceived to face a healthy aging. **Materials and methods:** Descriptive observational cross-sectional study in which a sample of 306 people was analysed. Socio-demographic data and variables related to leisure activities, health status, training, formative needs and predisposition to take a course on aging were evaluated. **Results:** About a 60 % of the respondents showed interest in receiving training about; healthy habits (59,1 %), proper diet (62,0 %), work out (59,6 %), future limitations (62,6 %), why we grow old (61,0 %), frequent illnesses in the elderly (62,5 %), use of medication (66,1 %), use of the health system (61,9 %), social resources (70,0 %), new technologies (64,0 %), care of sick people (60,5 %), and security aspects (61,6 %). **Conclusions:** There is a need to receive training among the elderly adult population in order to cope with aging in a healthier way. The main needs perceived by the elderly are: Healthy habits, possible future limitations due to the aging process, use of medication, functioning of the health system and access to social resources, new technologies and, finally, caring for sick relatives.

## KEY WORDS (SOURCE: DeCS)

Aging; retirement; health; habits; healthy lifestyle; training; knowledge.

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# ***Cómo afrontar el envejecimiento de forma saludable: cambios y oportunidades***

## RESUMEN

**Objetivo:** conocer las características sociodemográficas de las personas adultas mayores (60-70 años) de la población de Mataró (Barcelona) y su relación con el grado de conocimientos y las necesidades formativas percibidas para afrontar un envejecimiento saludable. **Materiales y método:** estudio observacional descriptivo transversal en una muestra de 306 personas. Se valoraron datos sociodemográficos y variables relacionadas con el tiempo libre, el estado de salud, la formación, los intereses formativos y la predisposición a realizar un curso sobre envejecimiento. **Resultados:** el 60 % de los encuestados mostró interés en recibir formación sobre hábitos saludables (59,1 %), dieta adecuada (62,0 %), ejercicio físico (59,6 %), limitaciones futuras (62,6 %), por qué envejecemos (61,0 %), enfermedades frecuentes en la tercera edad (62,5 %), uso de medicamentos (66,1 %), uso del sistema sanitario (61,9 %), recursos sociales (70,0 %), nuevas tecnologías (64,0 %), cuidado de las personas enfermas (60,5 %) y aspectos de seguridad (61,6 %). **Conclusiones:** existe la necesidad de recibir formación, entre la población adulta mayor, para afrontar el envejecimiento saludablemente. Así, es preciso tener un conocimiento amplio sobre las posibles limitaciones causadas por el envejecimiento, el uso de medicamentos, el funcionamiento del sistema sanitario, el acceso a los recursos sociales, las nuevas tecnologías, el cuidado de los familiares enfermos y hábitos de vida saludables.

## PALABRAS CLAVE (FUENTE: DECS)

Envejecimiento; jubilación; salud; hábitos; estilo de vida saludable; capacitación; conocimiento.

# *Como encarar o envelhecimento de forma saudável: mudanças e oportunidades*

## RESUMO

**Objetivo:** conhecer as características sociodemográficas das pessoas idosas (60-70 anos) da população de Mataró (Barcelona) e sua relação com o grau de conhecimentos e com as necessidades formativas percebidas para encarar um envelhecimento saudável. **Materiais e método:** estudo observacional descritivo transversal com uma amostra de 306 pessoas. Dados sociodemográficos e variáveis relacionadas com o tempo livre, o estado de saúde, a formação, os interesses formativos e a predisposição a fazer um curso sobre envelhecimento foram avaliados. **Resultados:** 60 % dos entrevistados demonstrou interesse em receber formação sobre hábitos saudáveis (59,1 %), dieta adequada (62 %), exercício físico (59,6 %), limitações futuras (62,6 %), motivos do envelhecimento (61 %), doenças frequentes na terceira idade (62,5 %), uso de medicamentos (66,1 %), uso do sistema sanitário (61,9 %), recursos sociais (70 %), novas tecnologias (64 %), cuidado de pessoas doentes (60,5 %) e aspectos de segurança (61,6 %). **Conclusões:** entre a população idosa, existe a necessidade de receber formação para encarar o envelhecimento saudável. Assim, é preciso ter um conhecimento amplo sobre as possíveis limitações causadas pelo envelhecimento, pelo uso de medicamentos, pelo funcionamento do sistema sanitário, pelo acesso aos recursos sociais, pelas novas tecnologias, pelo cuidado dos familiares doentes e pelos hábitos de vida saudável.

## PALAVRAS-CHAVE (FONTE: DECS)

Envelhecimento; aposentadoria; saúde; hábitos; estilo de vida saudável; capacitação; conhecimento.

## Introduction

Aging is a physiological transformation process which is inherent to the human being and it evolves differently on each person. It is considered an important change in people's lives because it changes their daily routines and affects their own perception and their health-related behaviours (1, 2). The world is undergoing a demographic transformation: The life expectancy increase and the fertility rate decrease are causing an inversion of the population pyramid (2, 3). Currently, the Spanish society reveals one of the highest life expectancies in the world: 82.87 years (4).

During aging, dependency rates, disability and chronic diseases increase which causes a greater expenditure of social and health resources (5). In addition to the physical consequences, there are changes that can significantly influence the quality of life of elderly people, such as the retirement.

Retirement marks a turning point in people's lives since it constitutes a transition that impels them to assume a new role in life. Despite this, many people find themselves immersed in this stage without having considered its meaning or the best way to cope with it (6, 7). Retirement challenges people to learn how to spend, satisfactorily, meaningfully and healthily, the time they have (8). Therefore, this moment is an ideal space to provide elderly adults (9) with intervention tools that allow them a good aging process (10).

Healthy aging is based on promoting and maintaining functional capacity that allows well-being during old age (2). However, a high percentage of people start this stage assuming excessive burdens that can harm their health and life quality (11, 12, 13): On one hand, the parents and grandchildren's care and, increasingly, the partner's care (9, 10); on the other, the growing number of elderly people living on their own and taking care of themselves (11, 12). Facing this scenario, there is a need to make changes in our healthcare system, coordinating health services and social services to achieve a healthy aging in a comprehensive, effective and sustainable way.

Health professionals have the opportunity and responsibility to respond to this new situation by enhancing preventive work, especially, the primary care nursing professionals, who have the community health work assigned.

Assisting the elderly to plan their old age stage, taking into account tertiary prevention, functional loss situations, and au-

tonomy that are generated by having a chronic disease, can help to promote a healthy aging (14, 15). There are many documented interventions generated from the nursing experience to promote healthy aging (16, 17), but, in our environment, there are no studies in which the description of the subjects that concern elderly people, or what they think it would be useful to know have been identified. This is what in our study we have defined as "training needs".

The increasing on population's aging that we are currently facing is exerting a great pressure on social and health system (18, 19). Therefore, it is necessary to know the needs of the elderly adults and find answers that allow them to maintain their autonomy, functional independence and quality of life as long as possible (20).

The principal aim of this study was to know the elderly socio-demographic characteristics (60-70 years), of the population of Mataró (Barcelona), and their relationship with the knowledge degree and training needs perceived to face a healthy aging.

## Materials and methods

### *Study design*

Descriptive cross-sectional observational study carried out in the primary care centers (CAP), Cirera-Molinos, Gatassa, Mataró-Centro, Riera, Ronda Cerdània and Ronda Prim, from the city of Mataró (Barcelona), which covers a population of 124,280 inhabitants (19), of which 12,309 are between 60 and 70 years old (47 % men and 53 % women) (20). The study started in May 2016 and concluded in May 2017.

### *Population and sample*

The study population was the elderly people from the city of Mataró. The inclusion criteria were: being between 60 and 70 years old, being registered in the city of Mataró and being able to answer the survey autonomously. The exclusion criteria were: being included in the home care program (ATDOM), being admitted to a social or residential centre or not understanding Catalan or Spanish.

The sample was selected by a randomized sampling from the population census assigned to each health centre, estimating to obtain a sample size of 300 people. For the sample size, a

confidence level of 95 % was established, a matrix whose x-axis presented the power 80 to 95 was presented, and expected correlations between 0,1 and 0,5. A sample size of at least 244 subjects was calculated, with a power of 95 and an expected correlation of 0,1. The final number of subjects surveyed was 306.

The research team was responsible for contacting the selected people; each subject was asked to participate by a telephone call. In the case that the selected patient did not meet the inclusion criteria or did not want to participate in the study, the next one was chosen from the list, and so on.

### **Study variables**

The main variables analysed were self-perceived knowledge degree and the training needs or interests, as well as the occupation of free time, the health status, the dose regular medication and the pathological background. The socio-demographic variables that were taken into account were age, sex, country of birth, marital status, residence neighbourhood, health reference centre, the maximum level of education accomplished, employment situation, occupation, family situation and approximate amount of monthly household income.

### **Measurement instruments**

The Questionnaire on Healthy Ageing (QHA) was used for data collection, developed *ad hoc* by a team of experts in the field of Geriatrics and primary health care. The QHA is aimed at the young elder population (60-70 years) and consisted of 139 items. The questionnaire evaluated demographics (including age, sex, country of origin, level of education, employment status, marital status, family situation and income level), how they spend their leisure time (activities carried out on a regular basis, including taking care of the grandchildren, time dedicated to them and caring of an ill relative), health status (this included two items which make reference to general health status: one of them has five options Likert-type response option, the second item was a vertical Visual Analogue Scale (VAS) of 20 centimetres, measured in millimetres, ranging from 0, which would be the worst imaginable health state, to 100, referring to the best imaginable health state). In it, the individual had to mark the point on the vertical line that best reflected the assessment of his/her global health in that moment. It also included four more items on chronic diseases, common medicines, degree of autonomy and perception of age-

ing, management of new technologies (section which consists of four items with option of a dichotomous response) and, finally, the training and training needs (included 112 items with Likert-type answer with four options each).

The QHA measures six dimensions of knowledge and training needs: Health, social, spiritual, legal and economic, and leisure traits. In order to calculate the results by size, the items were codified from 0 to 3, where 0 meant "nothing", 1 "a little", 2 "quite a lot", and 3 "a lot".

The total of the items belonging to the same dimension were added up together, and then, divided by the maximum possible score within in it, and the total was multiplied by 10, so each dimension was scored from 0 to 10 to ease the measurements' comprehension.

The first version of the QHA was monitored by a group of 14 persons who matched with the study inclusion criteria. All of them contributed with their comments about the questionnaire through a form. Taking this into account, as well as for its extension, it was determined that the questionnaire could not be done on the telephone, and this could be auto-administrated. The final version was validated by health professionals from the social ambit, as well as with the investigating team.

### **Data collect**

The subjects went to different health centres of the city, arranged by telephone from their health centre. The questionnaire was completed in a self-administered way and under the supervision of two members of the research team. The questionnaire was completed in groups of between 5 and 10 people. It lasted approximately 20 minutes.

### **Data analysis**

A descriptive analysis of the data with central tendency and dispersion measures for the quantitative variables, and with frequency distribution for the qualitative ones was realized. The level of statistical significance was established at a p-value <0,05. The comparisons between categorical variables were realized by means of the Chi-square test, and the continuous ones, with T-Student or their nonparametric equivalents. The data was analysed through the statistical program SPSS Statistics Version 14.0.

## Ethical considerations

The study was fulfilled in accordance with the articles pertaining to the Helsinki Declaration on ethical principles for medical research in humans, approved by the 64th World Medical Assembly in 2013. The permission to carry out this study (version 6 of 03/16/2016) was obtained from the Ethics Committee of Clinical research of the Maresme Health Consortium and the University Institute for Research in Primary Care (IDIAP Jordi Gol). All the individuals participated voluntarily, and they informed about their consent for the study: They received an informative document explaining the objectives of the study and in what it consisted of.

## Results

The data from a total of 306 subjects was obtained: The 52.1 % of them were men, and the 47.9 % women, with an average age of 64.4 years old ( $DS \pm 3.19$ ). The 77.6 % were married or maintained a relationship, the 12.5 % lived on their own, and the 28 % was taking care of an ill person, generally their parents. The 21 % didn't have studies, and on the other hand, the 78 % had studies (primary studies [52 %] or secondary studies/high school [26 %]). The digital alphabetization resulted to be majority on the positive side, as a 62.8 % of the participants affirmed to have skills on internet. As far as their labour situation, the 81.10 % were retired; the 65.60 % spend their time on, for example, sports or dancing (48.8 %), volunteering (20.8 %), arts or music (8.9 %), and more. Despite that, the 19.0 % was taking care of their grandchildren as the only activity. The 56.5 % of the participants was in good health and reflected an average of 71.3 ( $DS \pm 18.8$ ) out of the 100 possible points. Although this, mostly all the participants suffered from a chronic disease (83.6 %) and was taking an average of 2.94 pills per day (per person).

Regarding their aging, the 73.1 % declared their acceptance on the aging issue, while the 26.9 % felt fear, laziness or concern towards this process.

Table 1 shows the percentage of high self-perceived knowledge and of formative interest of the participants with respect to the different issues raised before, understanding as a high degree of knowledge or of formative interest when the subject answered "a lot" or "quite a lot" in the different items.

Mainly all the participants affirmed that they had a high degree of knowledge regarding aspects related to life habits (70.6 %), an

adequate diet (64.2 %), work out (70.2 %), possible future limitations (67.3 %), architectural barriers (64.5 %) and the living will (68.2 %).

However, around a 60 % of the respondents showed interest in receiving training about different aspects related to a healthy lifestyle (59.3 %), an appropriate diet (62.2 %), work out (59.7 %), possible future limitations (62.7 %), issues related to aging (61.1 %), frequent diseases in the elderly (62.6 %), taking medications (66.2 %), the use of the health system (61.9 %), social resources (70.1 %), new technologies (64.2 %), care of sick people (60.5 %) and security aspects (61.7 %).

Moreover, while only a 28.5 % of the subjects surveyed had completed a training course in the last five years, the 50.7 % of them said that they would take a training course on some of the previous mentioned aspects. It should be noted that the spiritual, legal, economic and leisure aspects are the least interesting among the population studied.

The table 2 shows the results corresponding to the relationship between the degree of self-perceived knowledge and sociodemographic aspects. It was found that a low level of education (up to primary school) is related to a lower degree of knowledge, this relationship is statistically significant ( $p = 0.001$ ) in all aspects, except in leisure, where the trend is maintained in a non-significant way ( $p = 0.059$ ). Likewise, in most of the aspects, men showed discreetly more knowledge, this tendency is statistically significant only in the case of the economic-legal aspects ( $p = 0.005$ ). We also found an association between lower income and less knowledge, this relationship being significant in aspects of health ( $p = 0.003$ ) and in economic aspects ( $p = 0.013$ ). No association was found between the degree of knowledge and the employment situation, the marital status and the family situation.

Finally, the table number 3 shows the relationship between training interests and socio-demographic aspects. There was a clear tendency to the greater formative interest from the women over the men in all the studied aspects, being this significant in aspects of health ( $p = 0.014$ ), spiritual aspects ( $p = 0.021$ ) and aspects of leisure ( $p = 0.038$ ).

Although in all aspects the highest level of studies was related to a greater educational interest, only statistical significance was found in the spiritual aspects ( $p = 0.040$ ).

**Table 1.** Percentage of high degree of auto-perceived knowledge and educational interests of participants (n = 306) in Mataró (Barcelona) Spain

	Percentage that manifests having a lot or quite a lot self-perceived knowledge	Percentage that has a lot or quite a lot interest in receiving training on this subject
<b>Health</b>		
Do you know healthy lifestyle habits for an elder person?	70,6	59,3
Do you know what is the right diet for an elder person?	64,2	62,2
Do you know what kind of work out is recommended at your age?	70,2	59,7
Do you know what are the possible future limitations that you may have as a result of aging?	67,3	62,7
Do you know why we age and what factors intercede in it?	52,6	61,1
Do you think you have information about sexuality in elder people?	34,5	46,2
Do you know what are the most frequent diseases when you get elder and how do they behave?	52,3	62,6
Do you know what changes in relation to medicines in the elderly?	22,0	66,2
What knowledge do you have of how to use the health system?	59,4	61,9
<b>Social traits</b>		
How well do you think you know the resources and the existing social help for the elderly people?	26,7	70,1
What knowledge do you have about architectural barriers?	64,5	53,8
Do you know how new technologies can help?	32,1	64,2
Do you think you are ready for the role change in the family that old age supposes?	55,3	56,1
Do you know how to take care of an ill person?	46,7	60,5
Do you know security aspects in elderly people? Do you know how to avoid risks?	53,3	61,7
Do you know ways to meet people of your age?	48,3	41,4
<b>Spiritual traits</b>		
Are you interested in reflecting on the transcendental or spiritual dimension of life?	31,2	28,5
In the third age, a revision of one's life project is often made. How do you think you are prepared to do it?	49,5	45,5
Do you feel ready to face death?	47,5	41,1
<b>Legal and economic aspects</b>		
How do you assess your knowledge of making a will and inheritance issues?	68,2	45,3
Do you know the document of anticipated wills?	48,3	53,0
When you retire, family income is often diminished. Do you think you will be able to adapt to living with less money?	84,0	43,8
If that were the case, would you know how to invest your money?	55,7	37,5
Do you have knowledge about guarantees, mortgages and other banking matters?	52,9	33,3
<b>Leisure aspects</b>		
What degree of knowledge do you have about volunteering activities that the elderly people can do?	35,7	46,9
What information do you have about studies aimed at older people?	20,3	46,1
Do you know where to find leisure offers and promotions for seniors?	37,2	51,2
Do you know about traveling in the elderly?	40,9	56,8

Source: Own elaboration.



**Table 2.** Relationship between the degree of auto-perceived knowledge and socio-demographic aspects  
(n = 306) in Mataró (Barcelona) Spain

Self-perceived knowledge	Health traits		Social traits		Spiritual traits		Legal and economic traits		Leisure traits	
	<i>x (±DS)</i>	<i>P-value</i>	<i>x (±DS)</i>	<i>P-value</i>	<i>x (±DS)</i>	<i>P-value</i>	<i>x (±DS)</i>	<i>P-value</i>	<i>x (±DS)</i>	<i>P-value</i>
Sex										
Man	5,09 (1,68)	0,956	4,74 (1.64)	0,951	4,24 (1,89)	0,663	5,83 (2,04)	0,005	3,94 (1,90)	0,277
Woman	4,99 (1,81)		4,73 (1.72)		4,41 (2,19)		5,12 (2,21)		3,67 (2,24)	
Education										
None	4,24 (1,90)	0,000	4,19 (1,81)	0,001	3.67 (2,16)	0,001	4,57 (2,07)	0,000	3,39 (1,91)	0,059
Any education level	5,32 (1,60)		4,92 (1,57)		4,52 (1,94)		5,81 (2,07)		3,96 (2,11)	
Employment situation										
Active	5,09 (1,56)	0,620	4,65 (1,64)	0,803	4,57 (1,80)	0,744	5,91 (1,90)	0,101	3,29 (1,69)	0,052
Unemployment	4,84 (1,68)		5,01 (1,54)		4,41 (2,21)		4,94 (2,06)		3,40 (2,44)	
Retired	5,09 (1,77)		4,70 (1,70)		4,27 (2,05)		5,59 (2,17)		4,01 (2,06)	
Never worked	4,95 (2,11)		4,76 (1,90)		4,11 (2,28)		4,93 (2,25)		4,25 (2,29)	
Civil status										
In a relationship or married	5,10 (1,69)	0,248	4,71 (1,65)	0,651	4,23 (1,93)	0,268	5,50 (2,10)	0,626	3,84 (2,01)	0,670
Single, widowed, separated or divorced	4,86 (1,90)		4,81 (1,77)		4,71 (2,31)		5,60 (2,22)		3,72 (2,31)	
Family situation										
Not living alone	5,05 (1,70)	0,985	4,74 (1,66)	0,638	4,22 (1,97)	0,133	5,49 (2,13)	0,488	3,90 (2,04)	0,090
Live alone	5,05 (2,00)		4,70 (1,80)		5,11 (2,32)		5,70 (2,14)		3,26 (2,28)	
Monthly income										
≤1000	4,42 (1,87)	0,003	4,28 (1,73)	0,168	3,96 (2,02)	0,638	4,70 (2,19)	0,013	3,36 (2,23)	0,334
1001-2500	4,93 (1,74)		4,60 (1,76)		3,97 (2,10)		5,49 (2,05)		3,59 (1,96)	
≥ 2500	5,83 (1,45)		4,76 (1,49)		4,20 (1,89)		6,11 (1,97)		4,17 (2,04)	

Source: Own elaboration.

Regarding the marital status and the family situation, it was found that people who did not have a partner or who lived alone showed a greater formative interest, being significant in leisure aspects ( $p = 0,02$  and  $p = 0,018$ ). In addition, there was a trend towards greater training interest on the part of retired compared to the rest of work situations options, and on the part of those who receive an average income (1,000-2,500) compared to those who have lower and higher incomes, but we do not find statistically significant the differences in these cases.

## Discussion

The purpose of this study was to know the sociodemographic characteristics of the “young” elderly (60-70 years) of the population of Mataró (Barcelona), as well as the relationship with their knowledge and training needs perceived on aspects related to the coping of a healthy aging.

The results obtained show that there is a need for training population sector. This study has allowed to know that as peo-

**Table 3.** Relationship between socio-demographic aspects and educational interests (n = 306) in Mataró (Barcelona) Spain

Training interests	Health traits		Social traits		Spiritual traits		Legal and economic traits		Leisure traits	
	x (±DS)	P-valor	x (±DS)	P-valor	x (±DS)	P-valor	x (±DS)	P-valor	x (±DS)	P-valor
Sex										
Man	5,14 (2,52)	0,014	5,16 (2,39)	0,095	3,49 (2,62)	0,021	5,41 (3,57)	0,137	4,58 (2,50)	0,038
Woman	5,89 (2,70)		5,56 (2,82)		4,32 (3,04)		6,07 (3,88)		5,17 (2,84)	
Education										
None	4,85 (3,07)	0,067	4,80 (2,95)	0,183	3,35 (3,01)	0,040	5,14 (3,91)	0,135	4,33 (2,73)	0,097
Any education level	5,72 (2,46)		5,53 (2,45)		4,08 (2,79)		5,92 (3,66)		5,00 (2,63)	
Employment situation										
Active	5,35 (2,57)	0,071	5,26 (2,78)	0,113	3,63 (2,59)	0,256	5,76 (3,48)	0,241	4,80 (2,46)	0,276
Unemployment	5,46 (2,76)		5,08 (2,89)		3,83 (2,94)		6,16 (4,34)		4,90 (2,78)	
Retired	5,73 (2,59)		5,59 (2,50)		4,12 (2,90)		5,86 (3,69)		5,00 (2,74)	
Never worked	4,26 (2,48)		4,26 (2,02)		2,83 (2,76)		4,16 (3,04)		3,92 (2,36)	
Civil status										
In a relationship or married	5,41 (2,70)	0,284	5,25 (2,61)	0,172	3,81 (2,86)	0,336	5,57 (3,74)	0,135	4,60 (2,65)	0,002
Single, widowed, separated or divorced	5,88 (2,27)		5,71 (2,56)		4,19 (2,82)		6,36 (3,58)		5,77 (2,63)	
Family situation										
Not living alone	5,53 (2,63)	0,900	5,36 (2,60)	0,845	3,86 (2,85)	0,374	5,67 (3,77)	0,348	4,73 (2,69)	0,018
Live alone	5,53 (2,47)		5,47 (2,50)		4,26 (2,78)		6,31 (3,27)		5,91 (2,25)	
Monthly income										
≤1000	5,09 (2,87)	0,811	5,13 (2,72)	0,553	3,64 (2,76)	0,305	5,52 (3,78)	0,372	4,68 (2,75)	0,253
1001-2500	5,34 (2,78)		5,24 (2,79)		3,70 (2,86)		6,63 (3,87)		4,59 (2,63)	
≥2500	5,05 (2,76)		4,65 (1,98)		2,59 (2,02)		4,29 (2,97)		3,61 (2,37)	

Source: Own elaboration.

ple get older, they perceive that they need to know more about healthy lifestyle habits and possible future limitations in the aging process, especially on how to deal with the care of a member of the family. Yet, they would like to know and have more social and technological resources. A report from the Spanish Ministry of Health (IMSERSO, 2002) and the Health Survey of Catalonia (ESCA, 2017) already showed that, for the elder, the aspects of greatest satisfaction in their lives are their health, their fitness, their free time and their lifestyle (21,22).

The characteristics of the sample are similar to other studies which have been already carried out in the Catalan population (23). It is significant that more than half of the participants reported being in good health and that the average of those scored their

self-perceived health status with 71.3 points. This shows that people perceive their state of health as good as long as it allows them to continue carrying out their daily activities autonomously (22,24). Likewise, the results are alike to the data obtained in 2017 in the Catalonia's population (21). It is also interesting to observe the digital literacy of the participants, who the majority of them, confirm they manage well on the internet.

Regarding self-perceived knowledge, men claimed to have more knowledge on legal and economic aspects than women. In a study that analysed the differences between cognitive aspects and quality of life on elderly men and women, it was observed that there were differences between both genders since men had a better subjective health than women (25). However, in our study,

we obtained similar results between both sexes in the rest of the scale dimensions. From another point of view, the educational level was found to be significant in all aspects of the survey: A higher level of education implies a greater degree of self-perceived knowledge. In this respect, the study by Navarro *et al.* (25), who found that the educational level was the major variability determinant regarding the quality of life in the elderly, beyond all the differences explained by the age or sex of the participants (25). Otherwise, it was observed that the level of monthly income was related to the health and economic-legal knowledge perceived, thus having a higher knowledge people with higher incomes. Aguilar-Palacio *et al.* (26) presented similar results, in which it concluded that there were differences in terms of health and the use of the health services in the elderly according to their social class. Therefore, it is necessary to ensure the accessibility and equity of health services (26).

Regarding the educational interest, women showed greater interest in all the survey aspects, a fact that can be explained by the progressive increase in the number of women living alone (27, 28). As other studies show, women have a greater need for social integration, which indicates that their interest in receiving training could be related, especially, with variables linked to the other's support (25,28). Besides, people who were not in a relationship, or married, or who lived alone showed more interest in leisure issues. These results agree with the SOLGER study (24), which shows that people who live alone are more interested in doing social and leisure activities (24).

Literature defines in an extensive way the negative effects that can cause the role of the caregiver (29, 30, 31), although it also describes positive traits of the act of caring when the caregiver lives his task as a privilege (30). Even so, the exclusive dedication to this task makes it impossible to develop other activities that could be related to a healthy aging (32). In our population, the 28 % of them took care of a relative, and the 19 % took care of their grandchildren as their only activity. Although it is not the objective of our study, the role of the caregiver is considered relevant in relation to the possible affectation of the quality of life and predisposition to be formed of these people.

Planning aging means considering everything that can keep us active and healthy, live to the fullest and be able to meet the basic needs. In many cases, the lack of information and training can trigger situations of isolation or loss of life quality. In general,

the results that emerge from this study show that older adults are interested in receiving training on different aspects of their lives to acquire knowledge that helps them maintain a good state of health during their aging. These results can help to design intervention strategies aimed at older adults to help them anticipate their needs and plan an active and healthy aging. At the same time, there is a raising in the need to have social and health resources that help older adults to occupy their free time in a satisfactory manner and without negative consequences for their own health, emphasizing facilitating the role of caregiver.

Different psychoeducational interventions directed to the caregiver have demonstrated their effectiveness in the past (30,16,17). An experimental study, developed by Zabalegui *et al.*, concluded that the intervention Information, Training and Social Support (INFOSA) reduced the overload and emotional stress and improved the perceived social support of the participants (31). Similarly, other studies carried out psychoeducational interventions that showed positive effects on overload, anxiety and depression (30,16). These studies indicate that the application of psychoeducational interventions entails significant improvements in terms of people's health and that, in addition, the application of these interventions over prolonged periods could maintain their long-term positive effects (30,16,17).

Given the cross-sectional nature of the study, causal relationships between the factors studied cannot be identified. However, the results obtained allow us to better understand the degree of knowledge and the training needs perceived by the elderly in relation to how they want to face their retirement and their aging. Even so, it would be interesting to replicate the study in populations with different social classes, as well as to split the sample between retired and non-retired people in order to compare possible differences.

The nursing professional, from primary care consultations, identifies elderly people who are in a new stage of the life cycle, in which, due to ignorance or poor planning, they find themselves in situations of isolation and loneliness, which in many cases Sometimes it causes a progressive loss of health. This study will allow nursing professionals to design psychoeducational interventions adapted to the real needs of this population, which help improve their knowledge, attitudes, habits and, consequently, the health outcomes of this sector of the population.

## Conclusions

The findings of this study cosign that training needs perceived by older people are fundamentally, the healthy life habits, i.e. work out and diet, the possible future limitations related to aging, the use of medicine, how the health system runs, the acces to social resources, the new technologies and, finally, their ill relatives' care.

On the other side, it also validates that elements such as the high education level and the high social class are related to a better autopercieved knowledge of the evaluated aspects.

Moreover, it is verified a high digital literacy degree which would facilitate an educational approach though the new technologies.

After all, the conclusion is that it exists the necessity of relieving a training among the elderly population, specially women, so they can face a healthy aging. Facing this scenario, the health professionals, particularly nurses, as the closest professionals, execute a decisive role on the elderly good quality of life guarantee.

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