Social Isolation Due to the Pandemic in Older People

María José Flores-Tena[1]*, Carmen Mañas Viejo[2], Ignacio Navarro Soria[3]

[1]*UniversityAlfonso X
[2]University Alicante
[3]University Alicante

Corresponding Author: María José Flores Tena[1]

KEYWORDS

Cognitive status; emotional state; solitude; social isolation; older people.

ABSTRACT:
In this article, we present a study that aims to verify the increase in cognitive decline in older people as a result of the pandemic suffered worldwide. This question is reflected in the objective of determining whether isolation was a consequence of the cognitive impairment suffered in the elderly. The study is part of a quantitative, non-experimental, descriptive and correlational design. The OARS scale was used to assess loneliness. The study involved 150 elderly people from a Senior Center in the Community of Madrid. The data collected in the questionnaires were analyzed using the Statistical Package for the Social Sciences. The main findings confirm that it is necessary to increase social relationships and activities to reduce cognitive decline

1. INTRODUCTION

Since the pandemic, there have been changes in everyone, especially older people. According to the World Health Organization (WHO), COVID-19 is an infectious disease caused by the coronavirus, the new virus and the disease it generates, were unknown before the outbreak broke out in Wuhan (China) in December 2019. The importance of this virus lies not simply in its severity, but in the speed with which it spreads to the population, and the impact it causes to risk groups in a short time.

Due to the impossibility of responding from the health services within the necessary deadlines, Royal Decree 463/2020 was published on 14 March 2020, which led to the declaration of a state of alarm for the management of the health crisis situation caused by COVID-19. The imposition of this decree implied the limitation of the movement of people, as established in its article 7, so that public roads could only be used to purchase food and basic necessities, attend health centres, travel to workplaces, provide assistance and care for the elderly, and go to financial institutions.

In times of the pandemic, the mental health and well-being of older people were affected in loneliness and cognitive decline (Caccia et al., 2020). In the elderly, this was reflected, in addition to the measures imposed for the

entire population mentioned above, with the Resolution of March 6, 2020 of the General Directorate of Public Health of the Community of Madrid by which the suspension of the activities ofcentres for the elderly and all possible typologies aimed at the elderly care sector, located in the Community of Madrid. This meant, therefore, the closure of the nerve centre for activities and participation of the elderly until the reopening with Order 787/2021 of 18 June. Therefore, all the measures mentioned above broke with the principles of preventive gerontology, which alleviates loneliness, and cognitive decline was affected in older people (Limón & Ortega, 2013), affecting aging and cognitive decline. defined by the WHO in 2002.

One can feel lonely without being socially isolated, while one can be socially isolated without feeling lonely (Pita, 2017). Therefore, loneliness is an objective measure that shows a lack of relationships, while loneliness is a perception, a subjective feeling.

Loneliness refers to the absence of satisfactory social relationships, as well as a low level of participation in the community (Santos-Olmo, 2016). This situation, as well as loneliness, are part of the life experience, clearly recognized in older people (Pita, 2017).

2. METHODOLOGY

To carry out this research and taking into account the proposed objective, a quantitative non-experimental

methodology of a comparative correlational nature is proposed. The hypothesis focuses on: whether there is a relationship between cognitive decline and loneliness as a result of the pandemic in older people.

The objective of the research is to find out if there is an increase in cognitive decline in the elderly due to loneliness.

The **sample** was random, with a total of 150 people from a Senior Center in Madrid who were previously informed of the objective of this research. The age range of the people who participated was between 60 and 90 years old, in men and women.

Instruments

It is important to note that the study has a quantitative nature, so an ad hoc questionnaire has been developed, for the elaboration two already validated instruments were used, one of them is the AD8 test to assess cognitive development, and the OARS scale to assess loneliness. The AD8 test is composed of 8 questions that assess the change in areas involved with a dementia syndrome, the areas considered most sensitive to predict cognitive decline. For each positive response on the change item, one point is awarded, while no change does not score. The higher the score, the greater the cognitive decline. Validation studies show that a score greater than two detects cases of mild dementia. The OARS Assessment Scale is a multidimensional questionnaire of functional counseling that evaluates social resources. in nine groups, from excellent resources to deteriorating social resources; With the combination of both scales, the variables that are analyzed focused on the objective of the research are shown. The following table shows the categorized variables.

Data collection

To collect the information, once the objective of the research was explained to the users of the center, the tests were distributed to the center, where they were completed over the course of a week, in the morning and afternoon, to the people who attended. Once all the theoretical information that was considered essential for the research was collected, the data obtained were analyzed.

3. RESULTS

Quantitative techniques have been used for the analysis of the data, as mentioned above. Taking into account the descriptive nature of our study, we have focused on the analysis of the results through means, frequencies and standard deviations of the data. In addition, the data collected in the questionnaires were analyzed using the Statistical Package for the Social Sciences (version 29.0

for Windows). An analysis of the reliability of the survey was carried out prior to being supplied to the sample, obtaining a reliability index according to Cronbach's alpha of 0.66.3, that is, a 66.3% reliability, therefore being above 60% acceptance.

The distribution of the sample with respect to the sex variable was composed of 51.4% women and 48.6% men.

Regarding the age variable, the sample had a mean age of 71 years with a standard deviation of 6.35. The minimum age represented in the sample is 62 years, and the maximum is 89 years, with 70 years being the most common age among the people in our sample. Figure 1 shows the distribution of the age variable based on the gender variable. Regarding marital status, the vast majority of the sample is married, with a percentage of 71.4%, followed by widows with 14.3%, and divorcees with 8.6%. Only 5.7% of our sample remained single. At this point, it is considered interesting to analyze the marital status variable in relation to the gender of the sample.

In the joint analysis, it can be seen that there is a higher percentage of widowed women, a fact that is more in line with the studies we talked about earlier. It is also worth noting the difference in the gender of divorced people, with almost twice as many women as men. On the other hand, the data indicate that 51.4% live with their partner, followed by 37.1% of people with family members and 11.4% who lived alone. Both data, marital status and cohabitation, are related as shown in the following table. It is of interest that there is a higher percentage of widows who live with family members compared to those who are left alone at home, it has been analysed whether this situation of isolation has been something new or if it was already occurring before the pandemic. To this end, a comparative analysis has been carried out.

Second, we need to know if cognitive decline has occurred in older people. Table 6 shows a higher prevalence of people without cognitive impairment after the pandemic, with 71.4% compared to 28.6% who reported suffering a decline in cognitive ability.

In the same vein, we are interested in knowing whether this cognitive impairment is a recent onset or whether, prior to the measures adopted during the pandemic, the people in our sample already had a decrease in their capacity. In Table 12, it can be seen that there has been a significant increase in cognitive impairment with 30% more cases.

It was checked if the variables with which we worked had a normal distribution in order to be able to carry out the subsequent analyses. With the application of the Kolmogorov-Smirnov normality tests to the variables, normality results have been obtained, except for the age variable, which has appeared at levels of significance higher than the 0.05 recommended in this type of study. Once this data has been reviewed, the Q-Q normality graphs of the variable have been analyzed, prioritizing in this case the data obtained in them, where the variable is distributed along the normality line, since the Kolmogorov-Smirnov test is very sensitive to such a small sample size.

It is observed that the correlation between loneliness and cognitive impairment is positive but weak, with a level of 0.194, therefore, it does not have a great significance. That is why it is not possible to establish a great relationship between the two variables.

Regarding the correlation between the level of education and cognitive impairment, as with the previous analysis, the relationship established is very weak, being in this case negative, with a significance level of 0.124 as shown in Table 8. In other words, the higher the level of education, the lower the cognitive decline, which coincides with the studies carried out on active ageing.

Another piece of information we were interested in knowing was whether there was a relationship between loneliness and knowledge of new technologies, for this we also used the Pearson test
The correlation has been analysed, obtaining a very low level of significance, with a negative 0.055 as shown in Table 9, which means that the more knowledge about new technologies one has, the lower the degree of loneliness.
To analyze knowledge in new technologies, we can base ourselves on the analysis of the variable of resources used for communication as shown in the following table, obtaining as results that, despite reporting good knowledge, older people do not use advanced means of communication.
Regarding the significance of the differences in cognitive impairment between men and women, it cannot be established that they exist since the level of significance is greater than 0.5 in the Student's t-test.

4. DISCUSSION AND CONCLUSIONS

With the analysis of the results obtained through the application of the questionnaire to the sample of 150 subjects participating in activities taught by the Center for the Elderly, it has been possible to contrast and inquire about the objectives set in this research.

As the World Health Organization has already announced, there are many determinants that affect our health, and it is impossible to establish a causal relationship between them, but there is an interrelationship in the different factors.

Through the application of correlational analysis techniques, it has been possible to verify that there is a relationship between two of the determinants of health defined and proposed by the World Health Organization, among others, namely loneliness and cognitive impairment in the elderly. The relationship established is very weak, but it shows that the greater the probability of loneliness, the greater the risk of suffering cognitive impairment at some level.

In this way, the main hypothesis that motivated this educational research would be valid. Starting with the analysis of the level of education, the average age of our sample, at about 71 years, has been characterized by being born and raised in a society where not all social strata could access high levels of education, and in this society manual work was also prioritized over intellectual work. That is why only 5% of the sample has completed higher education. Despite these circumstances, it is important to note that 97% of the sample has completed studies, which is a significant percentage. It should be noted that the subjects that make up the sample have always been characterized as active subjects, thus participating in activities for adults that require a certain degree of intellectual and cognitive development.

The people who are more active in social relationships, activities in the centres mean a significant reduction in the risk of suffering from diseases and, in turn, a strengthening of active ageing, which is so important in our society. Regarding the knowledge and management of new technologies, Santo-Olmo (2016) already commented that ignorance or difficult access to communication technologies could imply a high risk for the elderly by generating loneliness among other psychological problems. Through this research, it has been proven that this relationship is present, characterized by having a negative dimension. A good use of technologies, and especially in today's society characterized by the constant flow of information, can mean the difference between suffering or not suffering loneliness and therefore another series of pathologies that can not only be more serious for the subject himself, but also entail a greater cost for society as a whole. We

will now focus on the variable of loneliness. As in the research of Caccia, et al. 2020, significant differences have been found between men and women in relation to loneliness, with men suffering greater isolation and therefore gender being another risk factor for premature aging. On the other hand, it is important to highlight the results obtained in the pre-pandemic analysis of loneliness when compared with those of isolation during the state of alarm. The variation that has been shown, with about 40%, is of great significance. One of the issues that explains this sample behaviour has been what has been experienced in many Spanish households during the lockdown and the subsequent measures implemented as a result of the health crisis. The paralysis of lives as they had been carried out, and the return of the feeling of community and social being as a result of the social and health situation, in some cases, has led to a decrease in loneliness, increasing the number of social contacts and especially the frequency of these. As we mentioned at the beginning, loneliness is not the same as feeling lonely. Through the analysis of the data obtained, it has been verified that people who have good social relationships do not usually feel lonely, while totally socially disabled subjects report never having felt lonely during the state of alarm. Focusing now on cognitive decline, important data have also been presented to represent here. Despite the fact that only 28% of the sample reported having cognitive impairment as a result of the pandemic, when comparing cognitive impairment prior to the pandemic, it is established that the percentage increase in cognitive impairment is 30%, which is a high percentage when taking into account the sample size. One of the factors that through this research has been shown to be related to cognitive impairment has been the educational level, that is, the greater the development and enhancement of cognition, the lower and/or slower the deterioration in cognition that is generated, while no significant relationship has been found between cognition and gender. With the research carried out, it is shown that the pandemic and the measures taken during its management have caused modifications and discomfort on the elderly, thus showing the importance of the social component and its empowerment through the activities developed from specific and specialized centers such as the Centers for the Elderly, among others. It stands out as a hopeful fact, the forced isolation to which we have been subjected, has generated in a high percentage of cases, a reconnection with the most familiar and intimate environment, as well as an increase in co-responsibility towards the other. Finally, with the completion of this research, it has been possible to be even more aware of the importance of training older people in the management of new technologies, so that they can use them with a greater level of independence, allowing them to be connected with other people, family members in any circumstance.

BIBLIOGRAPHIC REFERENCES

1. Caccia, P.A., De Grandis, M.C., Pérez, G. (2020). Somatizations and perceived functional social support in the context of preventive and mandatory loneliness due to COVID-19, in Buenos Aires, Argentina. UNEMI Psychology Journal, 8(5), 8-18.
2. https://doi.org/10.29076/issn.2602-79vol5iss8.2021pp8-18p
3. Cataldi, M. (2020). Loneliness in institutionalized older people in the context of the COVID-19 coronavirus pandemic. Margin, 97, 1-6
4. Galea, S., Merchant, R. M., & Lurie, N. (2020). The Mental Health Consequences of COVID-19 and Physical Distancing: The Need for Prevention and Early Intervention. JAMA Internal Medicine, 180(6), 817-818. https://10.1001/jamainternmed.2020.1562
5. Flores-Tena; Reis, CS Reis. (2022). Study on the relationship between active ageing activities and the degree of satisfaction in older adults during COVID-19. Challenges
6. Girdhar, R., Srivastava, V., & Sethi, S. (2020). Managing mental health issues among elderly during COVID-19 pandemic. Journal of Geriatric Care and Research, 7(1), 29-32
7. Girmay, M., & Singh, G. K. (2019). Social Isolation, Loneliness, and Mental and Emotional Well-being among International Students in the United States. International Journal of Translational Medical Research and Public Health, 3(2), 75-82. https://10.21106/ijtmrph.82
8. Moreno-Tamayo, Karla, Sánchez-García, Sergio, & Doubova, Svetlana V. (2017). Factors associated with loneliness in a sample of older adults with social security. Salud Pública de México, 59(2), 119-120. https://doi.org/10.21149/8078
9. Limón Mendizabal, R. and Ortega Navas, M.C. (2013) Active and healthy aging. In Pérez Serrano, G. & De- Juanas Oliva, A. (Coords.), Quality of life in adults and the elderly (pp. 197-244) UNED
10. World Health Organization. (2002). Active ageing: a policy framework.
11. Revista Española Gerontol, 37(s2), 74-105
12. Ortiz Mayorga, L.R. (2018). Loneliness and cognitive impairment. [Bachelor's Thesis,

University TechniqueofAmbato]. Repository UTA https://repositorio.uta.edu.ec/jspui/handle/123456789/27415

13. Pita Díaz, R. (2017). Loneliness and loneliness in a random sample of people aged 65 and over. [PhD Thesis, Miguel Hernández University] http://dspace.umh.es/handle/11000/4850

14. Royal Decree 463/2020, of March 14, 2020, declaring the state of alarm for the management of the health crisis situation caused by COVID-19, BOE, no. 67, of March 14, 2020. March of 2020.

15. Resolution of 6 March 2020, of the Directorate-General for Public Health of the Community of Madrid, adopting public health measures in relation to the activity of centres for the elderly, in the typologies of homes and clubs and services for family and social coexistence., BOCM, no. 57, of 7 March 2020.

16. https://www.bocm.es/boletin/CM_Orden_BOCM/2020/03/07/BOCM-20200307-1.PDF

17. Santos- Olmos Sánchez, A.B. (2016). Elderly people in situations of loneliness: design and effectiveness of a psychological support service. [PhD thesis, Universidad Complutense de Madrid] https://eprints.ucm.es/id/eprint/37539/

18. Valtorta, N., & Hanratty, B. (2012). Loneliness, isolation and the health of older adults: do we need a new research agenda? Journal of the Royal Society of Medicine, 105(12), 518-522. https://10.1258/jrsm.2012.120128

19. The article was financed by the Call for Research Grants from the Atlantico Medio University within the project "Psychological Well-being in ung people: a program for the improvement of positive relationships and emotional self-esteem"

20. Santos-Olmos, A. (2016). Elderly people in situations of social isolation: design and effectiveness of a psychological support service. Madrid: Universidad Complutense Madrid].

21. Santamarina (2004). Analysis of the milestones of awareness of aging based on reports from older people.

22. Serrano, G. P., Oliva, D. J., París, E. C., Mendizábal, M. R. L., Prudenciano, J. L., Navas, M. D. C. O., & Plaza, Á. M. (2013). Quality of life in adults and the elderly. Editorial UNED

23. Valverde, J. (2002). Teacher Training for the Educational Use of Information and Communication Technologies, RELATEC - Latin American Journal of Educational Technology, 1(2), 9-28.

24. The article was financed by the Call for Research Grants from the Atlantico Medio University within the project "Psychological Well-being in young people: a program for the improvement of positive relationships and emotional self-esteem"