Quality of Life and Well-Being in Elderly Individuals Receiving In-Home Healthcare Support: A Cross- Sectional Study

Ina Stašević[1], Neda Dušak[2], Dinko Puntarić[1]

[1]Catholic University of Croatia
University Department of Nursing

[2]Virovitica-Podravina County Health Center, Outpost Slatina

Ina Stašević
ina.stasevic@unicath.hr
ORCID: 0000-0002-7868-8365

Neda Dušak
dusakneda53@gmail.com
ORCID: 0009-0009-8949-381X

Dinko Puntarić
dinko.puntaric@unicath.hr
ORCID: 0000-0001-9776-5533

Corresponding author:
Assist. Prof. Ina Stašević, MSc, PhD
Catholic University of Croatia
Department of Nursing
Ilica 244, 10000 Zagreb
ina.stasevic@unicath.hr

Abstract

Background: The basic problems faced by the elderly are: poor financial condition, loneliness, insufficient health care, lack of social contacts, lack of activities and low general life satisfaction.

Aim: The aim of this study was to examine the quality of life of elderly people, with regard to the support of health professionals in their homes.

Methods: This cross-sectional study was conducted on elderly individuals residing in the city of Slatina. Participants were divided into two groups: one receiving in-home support from healthcare professionals and the other not receiving such support. A standardized questionnaire was used, including general sociodemographic data and three adapted scales to assess quality of life.

Results: A total of 100 elderly individuals participated in the study, with half receiving in-home support from healthcare professionals and the other half not receiving such support. Participants receiving in-home support from health professionals have a significantly poorer health status, indicating greater health needs ($p<0.001$). They also show a greater need for social interaction ($p=0.007$) and rate their current situation as very difficult and sad ($p=0.01$). No significant differences were found in feelings of loneliness ($p=0.85$) or in overall quality of life assessment ($p=0.053$). However, reduced loneliness is associated with greater life satisfaction for all participants ($p<0.001$), especially for those receiving in-in-home support from healthcare professionals ($p<0.001$).

Conclusion: Participants receiving in-home support from healthcare workers tend to rate their health as poorer and perceive their health needs as greater, alongside a more pronounced sense of loneliness. Although there is a significant association between loneliness and quality of life, this relationship was not statistically confirmed among the participants. Loneliness is increasingly becoming a concern among the elderly, highlighting the need for focused social efforts to address this issue.

Keywords: elderly, quality of life, home care

Introduction

The basic problems faced by the elderly are usually poor financial condition, loneliness, insufficient health care, lack of social contacts, reduced activities and low general life satisfaction. An important role in solving their problems is played by health workers who provide them with institutional and non-institutional care (1). These issues are increasingly prevalent within our population, highlighting the need for the healthcare system to adapt to the evolving needs of its beneficiaries (2).

Research among older people has shown that the quality of life of people in the third age is largely determined by factors such as financial status, health, social contacts, activities and general life satisfaction. At the same time, no significant difference was found between the general socio-demographic variables (gender, age, level of education, place of residence, cohabitation, marital status, family status) and the tested quality of life indicators (3).

The majority of the elderly live alone in their homes, and due to impaired health, poor socioeconomic status and reduced quality of life, there is a need for increased social and health care (4). A greater need for health support is observed among older adults, single individuals, and those residing in homes for the elderly and infirm, while life satisfaction is higher in people living in a family (5). Aging is commonly viewed as a lifelong process, beginning at conception and encompassing a range of biological, physiological, and psychological transformations. Biological aging theories support this perspective by illustrating how the human body experiences functional changes from early development in utero, continuing throughout an individual's life until death (6).

In the aging process, there are a number of regressive changes that occur at the biological level. The risk of injuries and diseases and weakened functional abilities of the organism is increased (7). People experience aging processes differently. Therefore, the attitude towards aging is specific, whereby each person tries to achieve optimal adaptation to aging, which is of great importance in accepting old age and how to cope with it (8).

The concept of quality of life includes subjective and objective factors as well as the perception of each individual for his well-being in terms of health, a harmonious relationship with the physical environment and community, material well-being, and well-being on a psychological, physical and social level (9,10). The World Health Organization (WHO) defines quality as an individual's perception of his position in life in the context of the culture and value system in which he lives and in relation to his goals, expectations, standards and concerns (11). The quality of life is of interest to many disciplines such as theology, philosophy, sociology, psychology etc. (12-14).

Institutional care in homes for the elderly and infirm in the Republic of Croatia is unable to meet all of the needs of this population. According to the 2021 population census in the Republic of Croatia (RO), 22.5% of people are over 65 years old, which is more than 850,000 people (15). Only a part of them can be accommodated in homes for the elderly and infirm. The capacity of all homes in the Republic of Croatia (three homes owned by the Republic of Croatia, 45 homes owned by the counties/city of Zagreb, 121 private homes) is 16,712, while the demand for such accommodation is still high (7,430 elderly people are waiting for accommodation) (16). The appearance of multimorbidity decreases the quality of life of the elderly. The majority of the elderly remain in the community, so home health care can raise the level of quality of life (17). In doing so, the perspectives of biomedical and social determinants must be considered (18). More than three-quarters of the elderly population living in the community rely on help from others, such as family, friends, or neighbors. Assessing the needs of families, providing professional guidance, and equipping caregivers with the necessary skills are key to ensuring quality care for the elderly (19,20).

Many elderly individuals are increasingly choosing non-institutional care due to the greater benefits and flexibility offered by

home care (21). This approach emphasizes the importance of enhancing individuals' ability to care for themselves, supported by a well-developed system that provides various forms of assistance, along with strengthened support from families and local communities (22). Such care allows elderly individuals to stay in their homes longer, maintain control over their living environment, and it offers a more humane option.

Home health services play a crucial role in this type of care. Both outpatient services and home healthcare provide essential nursing care within the community (4). By focusing on prevention and health promotion, community nurses help reduce complications associated with various illnesses and contribute to an improved quality of life for the elderly (23).

There has been limited research on how in-home support from healthcare professionals impacts the quality of life of elderly individuals. Such studies are important because the analysis and interpretation of results can help better define the needs of the elderly, highlight differences in the aging process, and encourage their integration and acceptance within their communities (24,25). This underscores the need for further research into the relationship between the quality of life of elderly people and healthcare, particularly non-institutional care provided in their homes (26).

The aim of this study was to examine how in-home healthcare support affects the quality of life of elderly individuals by assessing its impact on their physical, financial, social and emotional well-being and comparing the quality of life between those who receive such support and those who do not.

Materials and Methods

Study design

This was a cross-sectional study.

Ethics

For the purposes of this research, the approval of the Ethics Committee of the Catholic University of Croatia (Class: 602-04/21-11/24, Reg. number: 498-03-02-06/1-21-02, date: March 29th 2021) and the Ethics Committee of the Virovitica-Podravina County Health Center (Number: 2189-67/1-01-2371/2021, date: September 6th 2021) was obtained. All participants were informed about the study's purpose and objectives and provided their written consent to participate.

Participants

Participants were 100 elderly people aged 65 and over who live in their homes in the area of the city of Slatina for a period of six months in 2021. Fifty of them have in-home support from healthcare workers, while the remaining 50 do not. In addition to the mentioned characteristics (age, staying at home), the inclusion factor in the study was informed consent up to the target sample size (50 participants in each group).

Data collection and study tool

The data were collected by visiting nurses and health care nurses of the Health Center of the Virovitica-Podravina County by interview in the respondent's home. Health workers filled out the survey questionnaires after talking with participants.

A questionnaire that consisted of general sociodemographic data and three adapted standardized scales that examined the quality of life (27, 28) was administered while respecting the scientific methodological approach (29), in accordance with the research that was done in Split in 2007, using the same questionnaire (5). The questionnaire consisted of four sections addressing the following areas: the needs of the elderly, an assessment of life satisfaction, an assessment of self-perception, and a general assessment of quality of life across a time scale (past, present, and future).

Quality of life was assessed using a scale of 20 items that form four domains: the financial needs scale, the social needs scale, the activity needs scale and the health needs scale. The reliability coefficient of the entire Cronbach's alpha scale is 0.843, and of individual domains as follows: financial needs scale is 0.873, social needs scale is 0.789, activity needs scale is 0.711 and health needs scale

is 0.741. Considering the obtained values of the Cronbach's alpha coefficient, it can be concluded that the questionnaire is a good tool for assessing the quality of life.

Life satisfaction was assessed with a 17-item scale with an internal reliability of Cronbach's alpha of 0.833, which confirms that the questionnaire is a good instrument for assessing life satisfaction.

Loneliness was assessed using the shorter UCLA Loneliness Scale through seven items, with an internal reliability of Cronbach's alpha of 0.780, which confirms that the scale is a good instrument for assessing participants' loneliness.

Statistical analysis

Categorical data were presented as absolute and relative frequencies. The normality of continuous variable distributions was tested using the Shapiro-Wilk test. Variables not following a normal distribution were described by the median and interquartile range (IQR), and non-parametric methods were applied for analysis. Differences in numerical variables between two independent groups were assessed with the Mann-Whitney U test (with a 95% confidence interval, CI). Spearman's correlation coefficient was used to examine the relationship between quality of life, life satisfaction, and loneliness scales across all participants, as well as within groups receiving and not receiving in-home support from healthcare professionals. Internal reliability of the scale was expressed using Cronbach's alpha coefficient.

All p-values are two-sided, with the significance level set at $\alpha=0.05$. Statistical analyses were conducted using MedCalc® Statistical Software version 20.014 and SPSS version 23.

Results

This study included 100 participants, with half receiving in-home support from healthcare professionals and the other half not. Of the participants, 64% are women, and 56% have lower vocational qualifications. Additionally, 37% of the participants do not live alone (they live with someone), 64% report being in good financial condition, and 55% rated their health as good.

Receiving in-home support from healthcare professionals was significantly more common among women, individuals aged 76 and over, those with lower vocational qualifications, individuals living with others, and those in poorer financial or health condition (Table1).

Based on self-assessment of financial needs, the majority of participants (25%) reported being financially dependent or fully reliant on others. Additionally, 16% indicated they lacked, or completely lacked, funds for basic needs, and 18% reported difficulty living due to financial constraints. In contrast, 58% stated that financial issues were not their primary concern, and an equal percentage reported not being financially dependent on others. However, 27% of participants expressed a need for additional financial assistance (Table 2).

The scale measuring the need for companionship revealed the following results: 42% of participants expressed a desire to socialize more frequently with younger individuals, and 36% reported lacking sufficient social contacts. Additionally, 34% stated that they wished to communicate more often with someone, even if only by letter or phone. A significant 71% of participants did not feel forgotten by others. Half of the participants expressed a desire for more frequent conversations, while 36% found it meaningful to discuss the purpose of life. Only 14% of participants wished to establish more friendships, whereas 43% indicated that they needed or completely needed more attention from others (Table 3).

Table 4 presents the need for activity through three items. Thirty-one percent of participants stated that they needed or strongly needed more organized recreational activities, while 74% expressed a desire to remain useful within their community. Additionally, 42% indicated a desire to continue learning and acquiring new knowledge (Table 4).

Table 1. *Participants according to characteristics*

	Number (%) of participants		Total	*P**
	They have in-home support from health professionals	They have no in-home support from health professionals		
Sex				
Male	13 (26)	23 (46)	36	**0,04**
Female	37 (74)	27 (54)	64	
Age (year)				
65 – 75	24 (48)	37 (74)	61	**0,008**
76 and more	26 (52)	13 (26)	39	
Level of education				
Low	35 (70)	21 (42)	56	**0,02**
Middle	13 (26)	24 (48)	37	
High	2 (4)	5 (10)	7	
Live				
Alone	11 (22)	22 (44)	33	**0,006†**
With somebody	39 (78)	28 (56)	67	
Financial condition				
Good	24 (48)	40 (80)	64	**0,001**
Bad	26 (52)	10 (20)	36	
Health condition				
Good	20 (40)	35 (70)	55	**0,003**
Bad	30 (60)	15 (30)	45	
Total	50 (100)	50 (100)	100	

*χ^2 test, †Fisher's exact test

Table 2. *Self-assessment of financial needs*

	Number of participants			
	No	Partially	Yes	Totally yes
I lack funds for the most basic necessities of life	63	21	10	6
I live hard because of lack of money	66	16	11	7
Financial problem is the most difficult problem at my age	58	14	19	9
I am financially dependent on others	58	17	24	1
I need additional financial assistance	54	19	19	8

Table 3. *Self-assessment of the socializing needs scale*

	Number of participants			
	No	Partially	Yes	Totally yes
I want to hang out with younger people more often	34	17	42	7
I miss more social contacts	37	23	36	4
I want to communicate with someone more often, at least by letter or phone	32	26	34	8
I feel like everyone has forgotten me	71	17	10	2
I want to talk to someone more often	20	25	50	5
This would give me the chance to talk about the meaning of life	33	28	36	3
I want to make more friendships	26	24	44	6
I need attention from others	32 (32)	25	41	2

Regarding health needs, most participants (69%) reported that they do not require psychological help in coping with aging challenges. However, one-third expressed a desire for constant support due to their health conditions, and 40% wished to discuss their problems with someone. Additionally, 31% indicated a need for ongoing medical care.

Participants receiving in-home support from healthcare professionals rated their financial situation significantly lower than those not receiving such support (p=0.02). They also had significantly poorer health conditions, indicating greater health needs (p<0.001). However, no significant difference was found between the two groups in terms of need for activity or social contacts, nor in the overall quality of life assessment (Table 5).

The general assessment of quality of life over time was evaluated through three statements. Reflecting on their past, 24% of participants described it as very difficult and sad, 56% as challenging but overall satisfactory, and 20% as successful and happy. No significant differences were observed in past assessments based on receiving in-home support.

In assessing their present, 12% of participants described it as very difficult and sad, 79% as challenging but satisfactory, and 9% as successful and happy. Those receiving in-home support were significantly more likely to describe their present as very difficult and sad, while participants without support were more likely to consider it successful and happy (p=0.01).

Looking to the future, 14% of participants viewed it as very difficult and sad, 76% anticipated challenges but satisfactory outcomes, and 10% considered it potentially successful and happy. No significant differences between the groups were found in their future outlook (Table 6).

Thirty-five percent of participants reported that they somewhat or completely lacked social connections, 20% had not been close

Table 4. *Self-assessment of activity needs*

	Number of participants			
	No	**Partially**	**Yes**	**Totally yes**
I need more organized recreational activities	49	20	30	1
I want to continue to be useful in my community	11	15	56	18
I want to continue learning and acquiring new knowledge	41	17	37	5

Table 5. *Differences in individual scales and overall quality of life in relation to whether participants have in-home support from health professionals or not*

	Median (interquartile range		
	They have in-home support from health professionals	**They have no in-home support from health professionals**	***p****
Scale of financial needs	1,6 (1,2-2,4)	1,2 (1-1,8)	0,02
Scale of needs for companionship	2,4 (2-2,6)	2,1 (1,5-2,3)	0,007
Activity needs scale	2,3 (1,7-2,7)	2,3 (1,7–3,0)	0,34
Health needs scale	2,5 (2-2,8)	1,4 (1-1,8)	<0,001
Overall quality of life	2,9 (2,3–2,8)	2,6 (2,5–2,9)	0,09

*Mann Whitney U test

Table 6. *Distribution of participants according to past, present and future assessments in relation to in-home support from health professionals*

	Number (%) of participants		Total	*p*
	Have support	Have support		
When I think about my past, mostly everything was				
very difficult and sad	15 (30)	9 (18)	24	**0,37**
with a lot of problems, but satisfactory	26 (52)	30 (60)	56	
satisfactory and happy	9 (18)	11 (22)	20	
When I think about present it is				
very difficult and sad	9 (18)	3 (6)	12	**0,01**
with a lot of problems, but satisfactory	40 (80)	39 (78)	79	
satisfactory and happy	1 (2)	8 (16)	9	
I see the future as				
very difficult and sad	10 (20)	4 (8)	14	**0,12**
with a lot of problems, but satisfactory	37 (74)	39 (78)	76	
satisfactory and happy	3 (6)	7 (14)	10	

*χ^2 test, †Fisher's exact test

to anyone for a long time, and 29% did not share their opinions and ideas with others. Additionally, 24% stated that no one knew them well, and 19% felt that their social relationships were superficial, while 12% were unhappy about being so withdrawn. No statistically significant differences were found between the observed groups (Table 7).

Among all participants, as well as those receiving in-home support from healthcare professionals, higher life satisfaction was correlated with improved overall quality of life, greater fulfilment of activity needs, fewer financial needs, and better health status. Loneliness was less pronounced among participants who rated their social contacts positively. For participants without in-home support, only the life satisfaction and activity need scales showed a significant relationship with overall quality of life, with no significant association between loneliness and any other scale or overall quality of life. Lower levels of loneliness were associated with higher life satisfaction across all participants, particularly in the group receiving in-home support from healthcare professionals (Table 8).

Table 7. *Differences in life satisfaction and loneliness in relation to home health care*

	Number (%) of participants			
	They have in-home support from health professionals	**They have no in-home support from health professionals**	**95% CI**	***p****
Life satisfaction	40 (33–47)	44 (37–49)	4 (0–7)	0,053
Loneliness	13 (10–16)	12 (10–15)	0 (-2–1)	0,85

CI – Confidence interval; *Mann Whitney U test

Table 8. *The connection between quality of life, life satisfaction and loneliness*

	Spearman's correlation coefficient Rho (p)	
	Life satisfaction scale	**Loneliness scale**
All participants		
Life satisfaction scale	-	**-0,303** (0,002)
Financial needs scale	**-0,267** (0,007)	0,115 (0,25)
Scale of needs for companionship	0,022 (0,83)	**0,282** (0,004)
Activity needs scale	**0,432** (<0,001)	0,002 (0,99)
Health needs scale	**-0,303** (0,002)	0,191 (0,06)
Overall quality of life	**0,472** (< 0,001)	0,035 (0,73)
Participants with health professionals' support		
Life satisfaction scale	-	**-0,321** (0,02)
Financial needs scale	**-0,358** (0,01)	0,187 (0,19)
Scale of needs for companionship	-0,030 (0,84)	**0,428** (0,002)
Activity needs scale	**0,489** (<0,001)	0,096 (0,51)
Health needs scale	**-0,390** (0,005)	0,269 (0,06)
Overall quality of life	**0,480** (<0,001)	0,087 (0,55)
Participant without health professionals' support		
Life satisfaction scale	-	**-0,280** (0,04)
Financial needs scale	-0,102 (0,48)	0,013 (0,93)
Scale of needs for companionship	0,194 (0,18)	0,132 (0,36)
Activity needs scale	**0,347** (0,01)	-0,067 (0,65)
Health needs scale	-0,078 (0,59)	0,074 (0,61)
Overall quality of life	**0,398** (0,004)	0,010 (0,95)

Discussion

Relatively little research has been conducted on the perception of self-determination in relation to quality of life among elderly individuals receiving in-home healthcare (30). Recent research in Germany confirms the importance of home care for the elderly in supporting their mental health and independent living (31). This is why home health care is increasingly important as an alternative to institutional care (32).

This research aimed to assess whether health support at home significantly impacts the quality of life among the elderly. The study included 100 participants aged ≥65, with half receiving in-home health support and the other half not. While significant differences were found in specific factors, such as financial, health, and socializing needs, no significant difference was observed in the overall quality of life assessment between the two groups.

Participants with in-home support from healthcare professionals rated their general quality of life somewhat lower than those without such support. Additionally, those receiving in-home health support were significantly more likely to describe the present as very difficult and sad, suggesting that this group consists of individuals who particularly need such support.

In the self-assessment of life satisfaction, most participants reported being satisfied, enjoying life, and maintaining a positive outlook, indicating a resilient spirit despite health challenges and advanced age. Participants without in-home health support expressed slightly higher satisfaction levels, which aligns with the finding that those requiring in-home support generally

have poorer health, making this difference anticipated.

No difference was found in the feeling of loneliness. Obviously, the in-home support provided by healthcare workers does not fully satisfy their need for conversation and companionship, which indicates the alienation of the elderly in our society and the insufficient commitment of society to provide adequate support to the elderly living in the community. It is precisely the intention of modern geriatrics to keep the elderly in the community in the best possible physical, mental and social health.

No difference was found in feelings of loneliness between the two groups, suggesting that in-home support from healthcare workers does not fully meet the elderly's need for conversation and companionship. This points to the social isolation of older adults and highlights society's insufficient efforts to provide adequate support for elderly individuals living in their own homes. Modern geriatrics aims to keep the elderly in the community, supporting their optimal physical, mental, and social health.

When comparing the results of this research with studies on the quality of life of the elderly in Split, a notable similarity emerges. In both, financial status, age, and health significantly influence quality of life, while the need for social interaction and activity appears more prominent than financial or health needs. Although in-home services provided by healthcare professionals would be highly beneficial for the elderly, they cannot fully meet their needs for social engagement and other forms of activity (5).

In a survey conducted in the Rijeka area, elderly individuals reported a relatively high quality of life. Social activity emerged as the most crucial factor for life satisfaction among the elderly in this study, highlighting the importance of fostering social engagement as a key area where society can support older adults (3). A cohort study conducted in Japan on factors influencing the quality of life among elderly individuals receiving home care indicates that perceptions of quality of life tend to decline over the years, with high functional dependence being linked to lower quality of life perceptions (33), aligning with the results of this study. Conversely, Canadian research confirms the benefits of home care for the elderly, showing a higher level of life satisfaction and lower stress levels (34), a finding not reflected in this study. Additionally, research in Iran emphasizes the need to monitor the quality of life of the elderly within the community and provide societal support (35). It is essential to note that the effects of social support vary across different cultural contexts, as highlighted by studies conducted in Canada and Latin America (36).

This study has both strengths and limitations. A key advantage is the direct access to elderly individuals in their homes, with data collected by healthcare professionals, fostering better cooperation and trust. This approach led to higher participant motivation and concentration, making the findings more reflective of real conditions. However, a primary limitation is the relatively small sample size from a limited geographical area, which restricts the generalizability of the findings to a broader population. Consequently, the results do not allow for a reliable determination of the true impact of healthcare professional support on the quality of life for elderly individuals living independently. This highlights the need for broader research to identify effective strategies for improving the quality of life and overall satisfaction of elderly individuals.

Conclusion

Based on the obtained results, on a small sample of participants, it can be that there is no significant difference in the assessment of the overall quality of life between participants who have and those who do not have the support of health professionals in their homes. The result, that participants who have in-home support from health professionals have a significantly worse health condition, that is, they have greater health needs, is logical and proves that such a service is provided precisely to those who need it most. As for the self-assessment

of life satisfaction, it is somewhat higher among those who do not need domestic help from healthcare workers, which is expected considering their better health and social condition. It is the same with the feeling of loneliness, which is slightly more pronounced in people whose house is occasionally visited by health professionals whose function is to provide health care in the user's home with a less pronounced social function. The results indicate the need of the elderly for social contacts and activities to be more involved in the life of the community. Therefore, it is necessary to implement different modality of social inclusion of the elderly, with the greatest possible involvement of volunteers in that process, which would raise their level of satisfaction with life and reduce the feelings of loneliness and uselessness.

Declarations

Acknowledgments

This study was part of Nada Dušak`s Master of Nursing thesis, originally written and defended in the Croatian language.

Authors' contributions

ND and DP: study design; ND: data collection; ND, IS, DP data analysis and interpretation; IS writing the first draft of the manuscript. All authors were involved in revising the manuscript and gave final approval of the version to be published.

Ethics considerations

The study protocol was approved by the Ethics Committee of the Catholic University of Croatia (Class: 602-04/21-11/24, Reg. number: 498-03-02-06/1-21-02, date: March 29th 2021) and the Ethics Committee of the Virovitica-Podravina County Health Centre (Number: 2189-67/1-01-2371/2021, date: September 6th 2021).

Funding

This study received no external funding.

Competing interests

The authors declare no conflicts of interest.

Data sharing statement

The authors confirm that the data can be obtained by contacting the corresponding author.

References

1. Armstrong D, Caldwell D. Origins of the Concept of Quality of Life in Health Care: a Rhetorical Solution to a Political Problem. Social Theory and Health. 2004;2:361-71.
2. Martinčević – Ljubanović R. Osvrt. In: Zdunić D. Zdrava i sretna starost. Zagreb: Spektar; 1985:11-5,27-30, 44, 60.
3. Kuzma D. Kvaliteta života osoba treće životne dobi (thesis). Rijeka: Filozofski fakultet; 2016;71-3.
4. Stiplošek Horvat B. Kvaliteta života starijih osoba i korištenje usluga skrbi u zajednici (završni rad). Varaždin: Sveučilište Sjever; 2017.
5. Žitnik E, Mužinić R. Kvaliteta života starijih osoba; rezultati istraživanja. Split: Udruga Mi, 2007;500:46.
6. Simic P, Guarente LP. Aging | Definition, Process, & Effects [Internet]. Encyclopædia Britannica. 2024. Available from: https://www.britannica.com/science/aging-life-process
7. Baneković L. Povezanost nekih psihosocijalnih čimbenika sa zadovoljstvom starijih osoba (thesis). Zagreb: Hrvatski studiji; 2017.
8. Lawton MP. Quality of life and the end of life. In: Birren JE, Schaie KW, eds. Handbook of the psychology of aging. San Diego: Academic Press; 2001;593-616.
9. Felce D, Perry J. Quality of life: A contribution to its definition and measurement. Cardiff : Mental handicap in Wales applied research unit. 1993;35:221-36.
10. Cummins RA. Objective and Subjective Quality of Life: An Interactive Model. Social Indicators Research. 2000;52:55-72.
11. WHO. WHOQOL: Measuring Quality of Life. Available from: https://www.who.int/tools/whoqol.
12. Cummins RA. Normative life satisfaction: measurement issues and a homeostatic model. Social Indicators Research. 2003;64:225-56.
13. Armstrong D, Caldwell D. Origins of the Concept of Quality of Life in Health Care: a Rhetorical Solution to a Political Problem. Social Theory and Health. 2004;2:361-71.
14. Halauk V. Kvaliteta života u zdravlju i bolesti. Bjelovar: Zavod za znanstvenoistraživački i umjetnički rad u Bjelovaru. 2013;7:251-7.
15. DZS, Popis stanovništva, 2021. Available from: https://dzs.gov.hr/vijesti/objavljeni-konacni-rezultati-popisa-2021/1270.
16. Republika Hrvatska, Ministarstvo rada, mirovinskog sustava, obitelji i socijalne politike. Godišnje statističko izvješće o domovima i korisnicima socijalne skrbi u Republici Hrvatskoj

u 2020. godini. Zagreb: Ministarstvo rada, mirovinskog sustava, obitelji i socijalne politike; 2021.

17. Stevens EG, Clarke S, Harrington J. Care home reforms should prioritize quality of life. BMJ. 2020;28:369:m2121.
18. Robinson ES, Cyarto E, Ogrin R, Green M, Lowthian JA. Quality of life of older Australians receiving home nursing services for complex care needs. Health Soc Care Community. 2022;30(6):e6091-e6101
19. Kelly K, Reinhard CS, Brooks-Danso, A. Professional Partners Supporting Family Caregivers. Am J Nurs. 2008;108:6-12.
20. Rostgaard T. Quality reforms in Danish home care - balancing between standardisation and individualisation. Health Soc Care Community. 2012;20:247-54.
21. Caregiving.org. World Cares Conversation 2022 [Internet]. Washington, D.C. Available from: https://www.caregiving.org/world-cares-conversation-2022/.
22. Havelka M, Despot Lučanin M, Lučanin D. Potrebe starijih osoba za cjelovitim uslugama skrbi u lokalnoj zajednici. Revija za socijalnu politiku. 2000;7(1):19-27, 31-2.
23. Mojsović Z, et al. Sestrinstvo u zajednici. Priručnik za studij sestrinstva – drugi dio, Korisnici u zajednici. Zagreb: Visoka zdravstvena škola; 2007:195.
24. Guyatt GH, Feeny DH, Patrick DL. Measuring health-related quality of life. Ann Intern Med. 1993;118:622-9.
25. Kovač B. Mjerenje kvalitete života vezane uz zdravlje kao mjerilo uspješnosti zdravstvene skrbi. Zdravstveni glasnik. 2017;1:86-93.
26. McDonald T, Frances Russell F. Long-Term Care Quality-of-Life Scale utility in community home care. Nurs Health Sci. 2019;21:494-500.
27. Lacković-Grgin K. Kratka verzija UCLA skale usamljenosti. Zbirka psihologijskih skala i upitnika. In: Lacković-Grgin K, Proroković A, Ćubela V, Penezić Z, ed. Zadar: Sveučilište u Zadru; 2002,156.
28. Bartlett H, Marshall A, Peel N. Measuring quality of life in older people: Reliability and validity of WHOQOL-OLD. Australasian Journal on Ageing. 2007;26(4):162-7.
29. Marušić M. et al. Uvod u znanstveni rad u medicini. 4th edit. Zagreb: Medicinska naklada; 2008.
30. Bölenius K, Lämås K, Sandman PO, Lindkvist M, Edvardsson D. Perceptions of self-determination and quality of life among Swedish home care recipients - a cross-sectional study. BMC Geriatr. 2019;24:142.
31. Blotenberg B, Seeling S, Büscher A. The health-related quality of life of older people through preventive home visits: A quantitative longitudinal study. Scand J Caring Sci. 2023;37(3):698-709.
32. Al-Surimi K, Al-Harbi I, El-Metwally A, Badri M. Quality of life among home health care patients in Saudi Arabia: a household-based survey. Health Qual. Life Outcomes. 2019;17(1):21.
33. Huang CH, Umegaki H, Kamitani H, Asai A, Kanda S, Maeda K, Nomura H, Kuzuya M. Change in quality of life and potentially associated factors in patients receiving home-based primary care: a prospective cohort study. BMC Geriatr. 2019;24:21.
34. Kadowaki L, Wister AV, Chappell NL. Influence of home care on life satisfaction, loneliness, and perceived life stress. Can J Aging. 2015; 34:75-89.
35. Jazayeri E, Kazemipour S, Hosseini SR, Radfar M. Quality of life in the elderly: A community study. Caspian J Intern Med. 2023;14(3):534-542.
36. Bélanger E, Ahmed T, Vafaei A, Curcio CL, Phillips SP, Cuncunegui MV. Sources of social support associated with health and quality of life: A cross-sectional study among Canadian and Latin American older adults. BMJ Open. 2016;6:e011503.