




ORIGINAL ARTICLE

## COPING STRATEGIES AND QUALITY OF LIFE AMONG OLDER PEOPLE WITH HYPERTENSION: A CROSS-SECTIONAL STUDY

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### ABSTRACT

**Objective:** to analyze the differences of coping strategies and quality of life among older people with hypertension in nursing homes of Indonesia. **Method:** a cross-sectional study was conducted among 71 older people during December 2018 in nursing homes. A self-administered questionnaire was used to identify characteristic of participants and quality of life for older people, while Sphygmomanometer was used to measure blood pressure. A Chi-square test was performed to analyse the data. **Results:** there were significant differences between coping strategies and quality of life of older people with hypertension ( $\chi^2=4.15$ ;  $p=0.041$ ). Older people who used coping strategies by focusing on problems have more likely moderate quality of life (OR=2.86; 95% CI=1.02-7.97). **Conclusion:** therefore, coping strategies of older people with hypertension should be improved to achieve their quality of life through caring and counselling.

**DESCRIPTORS:** Aged; Hypertension; Coping Behavior; Nursing Homes; Quality of Life.

### HOW TO REFERENCE THIS ARTICLE:

Mardiana I, Susanto T, Susuamningrum LA. Coping strategies and quality of life among older people with hypertension: a cross-sectional study. *Cogit. Enferm.* [Internet]. 2021 [accessed "insert day, month and year"]; 26. Available from: <http://dx.doi.org/10.5380/ce.v26i0.74702>.

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## INTRODUCTION

The final stage of human development occurs at old age<sup>(1)</sup>. Normally elderly people experience decreased cardiac output and increased peripheral vascular resistance. Hypertension elderly is caused by an increase in cardiac output, so that blood pressure increases<sup>(2)</sup>. Data from the Indonesian Ministry of Health of Indonesia showed the most elderly health problems in Indonesia are hypertension with an incidence rate of 57.6% aged 65-74 years and 63.8% for those aged 75 years and over<sup>(3)</sup>. The process of healing hypertension takes a long time, causing discomfort and can affect the quality of life of people with hypertension<sup>(4)</sup>. Previous study explained that the quality of life for hypertensive sufferers is lower than those without hypertension<sup>(5)</sup>. This is because hypertension affects the quality of life both in terms of physical and mental health.

The quality of life of the elderly is directly affected by life factors, including health status, being experiencing chronic pain, ordinary illness, or not experiencing a disease<sup>(5)</sup>. Health-related quality of life is the optimal level in physical role, social function, health-related perceptions, life satisfaction and well-being<sup>(6)</sup>. The quality of life is a condition that is influenced by the physical condition, psychologically, the level of independence, and the individual's relationship with the environment<sup>(7)</sup>. The unpreparedness of the elderly to face changes in mental, physiological, psychosocial functions will have an impact on the low achievement of quality of life<sup>(8)</sup>. The quality of life of the elderly can be influenced by a comfortable and peaceful place to live, good relations with the surrounding environment<sup>(9)</sup>. Every elderly person has a different way to achieve a better quality of life.

Quality of life of the elderly with hypertension is affected coping<sup>(10)</sup>. Hypertension treatment takes a long time, besides treatment cannot cure or eliminate hypertension but can reduce pain and prevent complications<sup>(11)</sup>. This causes the elderly to experience depression due to their illness, such as not being excited in their life, not being excited, and feeling helpless<sup>(12)</sup>. The elderly to adjust the changes and problems is associated with hypertension by selecting the right coping strategy<sup>(13)</sup>. The coping strategy chosen by the elderly is emotional focused coping<sup>(14)</sup>. The coping strategy that used by people with hypertension is problem focused coping<sup>(15)</sup>. These coping is influenced by the level of education, knowledge, and understanding of the problem<sup>(16)</sup>. The improper application of coping will have an impact on survival because it is considered to have failed in overcoming various demands and unable to manage problems that originate from both himself and outside himself<sup>(17)</sup>.

The coping strategies of the elderly in overcoming hypertension need to be considered, because this will have an impact on their health<sup>(18)</sup>. If the chosen coping strategy is not suitable, it can cause more serious problems, such as complications<sup>(19)</sup>. This situation has a direct effect on the welfare of the elderly, which is closely related to the quality of life. Based on the background description above, it is necessary to conduct a deeper study between coping strategies and the quality of life of the hypertensive elderly. The quality of life of the elderly can be influenced by the existence of effective coping strategies to achieve a healthy, quality and prosperous old age. Therefore, the purpose of this study was to analyze relationship of coping strategies and quality of life among older people with hypertension in nursing home of Indonesia.

## METHOD

The study design used a cross-sectional method by analysing the relationship of coping strategies and the quality of life for older people (OP) with hypertension in Nursing Homes of Jember, Indonesia. This study was conducted from December 2018 to January

2019.

The population in this study were all of OP in nursing homes of Jember. The inclusion criteria are the OP who are willing to be participants, the OP who live in nursing homes of Jember, and have hypertension in stages 1 and 2. Exclusion criteria for the elderly who cannot communicate well and the elderly who have cognitive impairments. Adapted to the inclusion and exclusion criteria there were some OP who were not participants, including thirteen elderly who were not present at screening, 35 were not hypertensive, four of OP refused to be participants, and seven of OP had cognitive impairment. Determination of participants using convenience-sampling techniques and obtained 71 participants.

A self-administered questionnaire was used to measure characteristics of participants. While, blood pressure of OP was measure using Sphiromanometer which measured in the early morning. The coping strategy variable was measured using the "Hypertension Coping Strategy" questionnaire, which is a modification of the ways of coping by previous researchers and reliability validity tests were obtained Cronbach alpha 0.83, consisting of 19 questions from coping strategy indicators focusing on problems and emotions. The final results of the questionnaire by summing each indicator and the highest number is the coping strategy used<sup>(15)</sup>.

The quality of life variable was measured using the quality of life questionnaire for older people from WHO (WHOQOL-OLD) questionnaire, consisting of 24 statements with indicators of sensory ability, death, activity (present, past, and future), social, autonomy, and closeness. This questionnaire was translated and validated by researchers, Cronbach alpha 0.94 was obtained. The final result of the questionnaire was obtained by summing all the questions and using the transformed total score range from 0-100, with a category score of category 32 (low); score 33 - 66 (moderate); and a score of  $\geq 67$  (high)<sup>(20)</sup>.

The first data collection technique was the researcher submitting a permit application for research to the Nursing Faculty of the University of Jember, the Institute for Research and Community Service of the University of Jember, the East Java Social Service, and the UPT PSTW Jember. Before carrying out the research, the researcher explained earlier that the related research would be carried out and gave an informed consent sheet to all participants as a form of approval in this study. Participants can refuse and prefer not to be involved in the study.

Participants who were willing to be the subjects of the study immediately took blood pressure measurements. If the results of blood measurements are included in stage 1 of hypertension (Systolic 140-159 mmHg; Diastolic 90-99 mmHg) and stage 2 of hypertension (Systolic  $\geq 160$  mmHg; Diastolic  $\geq 100$  mmHg) regarding JNC VIII, the OP screening related to cognitive function besides that is also adjusted to the inclusion and exclusion criteria. If appropriate, the elderly are given a research questionnaire. The researcher directly assisted the filling out of the OP questionnaire and read out the questionnaire, the OP answered according to what they experienced.

Data analysis was performed using Statistical Package for the Social Sciences 19 software; numerical data with normal distribution were presented in the form of mean, standard deviation, t value, and p-value with one sample test. If the data are abnormally distributed, it is presented in the form of median, percentiles, Z values and significance test determined using the Kolmogorov-Smirnov test. Types of categorical data are presented in the form of numbers and percentages. Chi-square test was used to determine the relationship between coping strategies and the quality of life for OP with hypertension at nursing homes of Jember.

Has obtained ethics approval from the Dean of the Faculty of Nursing, the University of Jember Research and Service Institution, and nursing homes of Jember. In addition, this study carried out ethical tests at the Faculty of Dentistry, University of Jember, with No. 221/UN25.8/KEPK/DL/2018 stated that this research can be carried out by paying attention to the principles of research.

## RESULTS

The characteristics of the participants in this study are shown in Table 1. It is known that the characteristics of OP with hypertension in this study at the older elderly stage. In this study, among 46 of OP (64.8%) were women, 70 of OP (98.6%) were Muslims, and 57 of OP (80.3%) were Javanese ethnic background. Among 65 of OP (91.5%) with hypertension were not married and 42 of OP (52.1%) were employment being laborers.

Table 1 - Distribution of characteristics of older people with hypertension in nursing homes. Jember, Jawa Timur, Indonesia, 2018

Characteristics of older people	n (%)
Age (year)	
M±SD	74.92±7.95
Long Stay in UPT PSTW (year)	
Md (P <sub>25</sub> - P <sub>75</sub> )	3 (1 - 6)
Gender	
Male	25 (35.2)
Female	46 (64.8)
Religion	
Catholic	1 (1.4)
Islam (Muslim)	70 (98.6)
Ethnic	
Madurish	14 (19.7)
Javanese	57 (80.3)
Marital Status	
Marriage	6 (8.5)
Not Marriage	65 (91.5)
Work History	
Private Employees	11 (15.5)
Entrepreneur	1 (1.4)
Laborer	42 (59.2)
Education Level	
School	33 (46.5)
Not School	38 (53.5)

Note. Md = Median; P<sub>25</sub>-P<sub>75</sub>= Percentiles 25-75; M=Mean; SD=Standard Deviation.

Source: Authors (2018)

Table 2 showed that the blood pressure of participants was in stage 1 both in systolic

(74.6%) and in diastolic (62%) blood pressure, respectively. The OP with hypertension who were participants had no impairment in cognitive function (56.3%). The OP with hypertension at nursing homes of Jember for solving a problem more by using coping strategies focusing on problems (67.6%). The quality of life between OP with hypertension is not the same, according to the conditions and conditions of each individual. In accordance with the questionnaire used, namely WHOQOL-OLD, the quality of life of OP with hypertension who were participants in this study were more likely to have a moderate quality of life.

Table 2 - Proportion of blood pressure, participant cognitive function, coping strategies, and quality of life of older people in nursing homes. Jember, Jawa Timur, Indonesia, 2018

Variable	n (%)
Systolic	
Stage 1	53 (74.6)
Stage 2	18 (25.4)
Diastolic	
Stage 1	44 (62)
Stage 2	27 (38)
Cognitive Function	
No Interference	40 (56.3)
There may be a Disturbance	31 (43.7)
Coping Strategies	
Emotion Problem Coping	23 (32.4)
Focused Problem Coping	48 (67.6)
Quality of Life	
Low	28 (39.4)
Medium	43 (60.6)

Note. Stage 1 of hypertension (Systolic 140-159 mmHg; Diastolic 90-99 mmHg) and stage 2 of hypertension (Systolic  $\geq$ 160 mmHg; Diastolic  $\geq$ 100 mmHg).

Source: Authors (2018)

Table 3 shows that there is a difference between coping strategies and quality of life, as evidenced by the Chi Square test ( $\chi^2=4.15$ ; p-value=0.041). It can be concluded that there is a relationship between coping strategies and the quality of life for OP with hypertension at nursing homes of Jember. Elderly people who use coping strategies with problem-focused opportunities are 2.86 times to have a quality of life in the moderate category (OR=2.86; 95% CI=1.02-7.97).

Table 3 - The Relationship of coping strategies and quality of life among older people in nursing homes. Jember, Jawa Timur, Indonesia, 2018

Coping Strategies	Quality of Life		$\chi^2$ (p-value)	OR	95% CI Low-Upper
	Low n (%)	Medium n (%)			
Focused problem coping	15 (53,6%)	33 (76,7%)	4,15	2,86	1,02-7,97
Emotion problem coping	13 (46,4%)	10 (23,3%)	-0,041		

Note: OR=Odds Ratio;  $\chi^2$ =Pearson Chi-Square; CI=Confidence Interval

Source: Authors (2018)

## DISCUSSION

Based on the results of this study, there is a relationship between coping strategies and the quality of life for OP with hypertension at nursing homes of Jember. This research is also in accordance with the previous one, which revealed that there was a relationship between coping strategies and quality of life. All individuals have equal opportunities to get a good quality of life and coping strategies used are different.

The results of this study the majority of the OP experienced hypertension in stage 1 both in their systolic pressure (74.6%) and diastolic (62%). Elderly hypertension generally experiences setbacks in health problems, one of which is psychological problems<sup>(21)</sup>. The OP feel afraid and anxious about the effects of hypertension, related to prolonged treatment, complications, strokes, and death<sup>(22)</sup>. This results in an increase in the hormone adrenaline and a decrease in the hormone norepinephrine, so elderly hypertension feels tense and not calm with the situation<sup>(23)</sup>. Regarding the problem of hypertension, the OP need to adapt to their health condition by determining the appropriate coping strategies<sup>(24)</sup>. The success of the OP can be seen from the ability to adapt to various changes and life events that can bring better changes in his life.

Coping strategies carried out by OP with hypertension in nursing homes of Jember use more coping strategies by focusing on problems (67.6%). The results of this study are supported by previous research, older people who live in nursing homes use coping strategies more by focusing on problems. This is because the institution lives in a residential environment and allows the OP to interact with each other including in solving a problem. Someone who gets social support will use coping strategies by focusing on problems, which are related to his psychosocial needs<sup>(25)</sup>. Therefore, in order to control their blood pressure, the OP should prioritize coping strategies that focus on the problem. As we get older, a person will be faced with a variety of problems; through an individual process can understand how to solve the problem related to coping strategies undertaken.

The results of this study the majority of OP with hypertension have moderate quality (60.6%). Similar to other studies related to the quality of life of OP with degenerative hypertension, more OP have sufficient quality of life than those who have the poor or high quality of life<sup>(26)</sup>. The health status of the OP is affected by the presence or absence of disease in the OP's body. The OP who do not have complaints are capable of carrying out activities and activities every day<sup>(27)</sup>. The quality of life of the OP is influenced by circumstances or factors in life that occur directly<sup>(28)</sup>. Therefore, the OP with hypertension must be able to maintain the health of his body, especially the treatment of hypertension in terms of controlling his blood pressure. The quality of life of OP with hypertension is lower than in the elderly without hypertension.

The result of this study is that there is a relationship between coping strategies and the quality of life for OP with hypertension at nursing homes of Jember. In line with previous research, individuals who use more coping strategies by focusing on problems can improve their quality of life<sup>(21-22)</sup>. Meanwhile, other studies explain appropriate coping strategies that can improve quality of life, both by focusing on the problem more towards active planning and including adaptive coping and focusing on emotions more towards acceptance<sup>(23-24)</sup>. Therefore, elderly hypertension must use coping strategies that are appropriate to the problem. If the selection of coping strategies is not appropriate, resulting in problems that cannot be solved and can add new problems.

Furthermore, the coping strategy by focusing on problems has a greater chance of being 2.86 times to have a moderate quality of life. The more severe the problem, the lower the quality of life. The OP need to adapt or adjust to problems first so they can adjust or position themselves because they are related to coping strategies that will be carried out. The type of coping chosen by the OP both with emotions and behavior, both of which will change the stressor that affects the quality of life<sup>(25-27)</sup>.

This study has limitations, namely, the number of participants in this study is small because only in one place (one site center), the results will likely be different if the number of participants is more and uses a wider scope of research sites (multicenter study).

## CONCLUSION

Coping strategies related to the quality of life of OP with hypertension in nursing homes of Jember. This is due to the selection of coping strategies that are appropriate in dealing with hypertension problems, to improve the quality of life for OP with hypertension.

The results of this study can provide several recommendations related to the handling of coping strategies and the quality of life for OP with hypertension. Among them are involving the OP in each activity determination, so that a coping strategy will be formed in the OP in solving a problem. For this reason, health workers in the nursing homes of Jember compiled a list of activities for the OP, and then encouraged them to choose and prioritize the activities to be carried out. Therefore, coping strategies of older people with hypertension should be improved to achieve their quality of life through caring and counselling.

## REFERENCES

1. Kementerian Kesehatan Republik Indonesia. Infodatin Lanjut Usia (lansia). Pusat Data dan Informasi Kementerian Kesehatan RI. [Internet]. Republik Indonesia; 2016 [access in 12 dec 2019]; Available from: <https://www.kemkes.go.id/resources/download/pusdatin/infodatin/infodatin%20lansia%202016.pdf>.
2. Sari, A. Fauzia, L. Pengukuran kualitas hidup pasien hipertensi di puskesmas mergangsan Yogyakarta menggunakan European Quality of Life 5 Dimensions (EQ5D) Questionnaire dan Visual Analog Scale (VAS). J Ilm Ibnu Sina. [Internet]. 2017 [access in 3 oct 2019]; 2(1). Available from: <https://studylibid.com/doc/804079/pengukuran-kualitas-hidup-pasien-hipertensi-di-puskesmas>.
3. Sumakul GT, Sekeon SAS, Kepel BJ. Hubungan Antara Hipertensi Dengan Kualitas Hidup Pada Penduduk di Kelurahan Kolongan Kecamatan Tomohon Tengah Kota Tomohon. Kesmas. [Internet]. 2017 [access in 05 oct 2019]; 6(3). Disponivel em: <https://ejournal.unsrat.ac.id/index.php/kesmas/article/view/23029/22725>.

4. Kim IH, Noh S, Chun H. Mediating and Moderating Effects in Ageism and Depression among the Korean Elderly: The Roles of Emotional Reactions and Coping Responses. *Osong Public Heal Res Perspect*. [Internet]. 2016 [access in 09 oct 2018]; 7(1). Available from: <https://doi.org/10.1016/j.phrp.2015.11.012>.
5. Setiyorini E, Wulandari NA, Sari YK. Upaya Untuk Meningkatkan Kualitas Hidup Lansia Melalui Perilaku (Persatuan Lansia Ingin Hidup Sehat) Di Desa Jatidowo Kecamatan Rejotangan Kabupaten Tulungagung. *Repository Stikes Patria Husada Blitar*. [Internet]. 2018 [access in 09 oct 2018]; 2(2). Available from: <http://repository.phb.ac.id/416/>.
6. Samper TP, Pinotoan OR, Katuuk ME. Hubungan Interaksi Sosial Dengan Kualitas Hidup Lansia Di BPLU Senja Cerah Provinsi Sulawesi Utara. *E-Journal Keperawatan (e-KP)*. [Internet]. 2017 [access in 09 oct 2018]; 5(1). Available from: <https://ejournal.unsrat.ac.id/index.php/jkp/article/view/14695/14263>.
7. Putri ST, Fitriana LA, Ningrum A, Sulastri A. Studi Komparatif: Kualitas Hidup Lansia yang Tinggal Bersama Keluarga dan Panti. *J Pendidik Keperawatan Indones*. [Internet] 2017 [Access on 7 oct. 2019];85(229):1–6. Available from: <https://ejournal.upi.edu/index.php/JPKI/article/view/1178>.
8. Meléndez JC, Fortuna FB, Sales A, Mayordomo T. The effects of instrumental reminiscence on resilience and coping in elderly. *Arch Gerontol Geriatr*. [Internet]. 2015 [access in 09 oct 2018]; 60(2). Available from: <https://www.sciencedirect.com/science/article/pii/S0167494314002258?via%3Dihub>.
9. Priyoto P. Hubungan Depresi dengan Kejadian Hipertensi pada Lansia di Unit Pelaksana teknis Pelayanan Sosial Lanjut Usia Kecamatan Selosari Kabupaten Magetan. *J Kesehatan*. [Internet]. 2017 [access in 6 oct 2019]; 4(1). Available from: <http://jurnal.bhmm.ac.id/index.php/jurkes/article/view/25/29>.
10. Andriani S. Studi Kasus Strategi Koping Lansia Dengan Tempat Tinggal. *J Ilmu Keperawatan*. [Internet]. 2015 [access in 4 oct 2019]; 3(1). Available from: <http://jurnal.unsyiah.ac.id/JIK/article/view/5189>.
11. Indriyati DS, Widyaningrum N. Pengaruh Health Locus of Control Terhadap Kepatuhan Diet Pada Penderita Hipertensi. *J. pemikiran penelit. psikol*. [Internet]. 2014 [access in 8 oct 2019]; 10(2). Available from: <http://jurnal.unmuhjember.ac.id/index.php/INSIGHT/article/view/303>.
12. Hilman M, Gita HR. Correlation between social support and individual coping strategy of hypertension at tagogapu village. [Internet]. 2017 [access in 09 oct 2018]; 17. Available from: <https://repository.unej.ac.id/bitstream/handle/123456789/91121/lfa%20Mardiana-152310101196.pdf?sequence=1>.
13. Lee M, Nezu AM, Nezu CM. Positive and negative religious coping, depressive symptoms, and quality of life in people with HIV. *J Behav Med*. [Internet]. 2014 [access in 09 oct 2018]; 37(5). Available from: <https://link.springer.com/article/10.1007/s10865-014-9552-y>.
14. Meléndez JC, Fortuna FB, Sales A, Mayordomo T. The effects of instrumental reminiscence on resilience and coping in elderly. *Arch Gerontol Geriatr*. [Internet]. 2015 [access in 09 oct 2018]; 60(2). Available from: <https://www.sciencedirect.com/science/article/pii/S0167494314002258?via%3Dihub>.
15. Tamher dan Noorkasiani. *Kesehatan Lanjut Usia dengan Pendekatan Asuhan keperawatan*. Jakarta: Salemba Medika; 2011. 102 p.
16. Farran N, Ammar D, Darwish H. Quality of life and coping strategies in Lebanese Multiple Sclerosis patients: A pilot study. *Mult Scler Relat Disord*. [Internet]. 2016 [access in 09 oct 2018]; 6. Available from: <https://doi.org/10.1016/j.msard.2015.12.003>.
17. Saputri ND, Susanto T, Susamningrum L.A. Association between Cognitive Function and Quality of Life in Aged People in an Elderly Home. *Rev Cubana Enferm* [Internet]. 2020 [access in 04 aug 2020]; 36(2). Available from: <http://www.revenfermeria.sld.cu/index.php/enf/article/view/3244>.
18. Buford TW. Hypertension and aging. *Ageing Research Rev*. [Internet]. 2016 [access in 09 oct 2019]; 26. Available from: <https://doi.org/10.1016/j.arr.2016.01.007>.
19. Olack B, Wabwire-Mangen F, Smeeth L, Montgomery JM, Kiwanuka N, Breiman R. Risk factors of hypertension among adults aged 35 – 64 years living in an urban slum Nairobi , Kenya. *BMC Public Health*. [Internet]. 2015 [access in 09 oct 2018]; 15(1251). Available from: <http://doi.org/10.1186/s12889->



[015-2610-8](#).

20. Lumi F, Terok M, Budiman F. Hubungan derajat penyakit hipertensi dengan tingkat kecemasan pada kelompok lanjut usia di wilayah kerja puskesmas kahakitang kecamatan tatoareng. *Media Kesehatan Politek Kesehat Makassar*. [Internet]. 2018 [access in 09 oct 2018]; 13(2). Available from: <http://journal.poltekkes-mks.ac.id/ojs2/index.php/mediakesehatan/article/view/664>.
21. Kumar R, Kaur S, Reddemma K. Burden and coping strategies in caregivers of stroke survivors. *Nurs Midwifery Res J*. [Internet]. 2015 [access in 09 oct 2018]; 11(2). Available from: <https://www.jneuro.com/neurology-neuroscience/burden-and-coping-strategies-in-caregivers-of-stroke-survivors.php?aid=6964>.
22. Chen HM, Huang MF, Yeh YC, Huang WH, Chen CS. Effectiveness of coping strategies intervention on caregiver burden among caregivers of elderly patients with dementia. *Psychogeriatrics*. [Internet]. 2015 [access in 09 oct 2018]; 15(1). Available from: <https://doi.org/10.1111/psyg.12071>.
23. Harahapa J, Andayanib LS. Pola Penyakit Degeneratif. Tingkat Kepuasan Kesehatan dan Kualitas Hidup pada Lansia ( Lanjut Usia ) di Kota Medan TALENTA Conference Series Pola Penyakit Degeneratif , Tingkat Kepuasan Kesehatan dan. [Internet]. 2018 [access in 09 oct 2018]; 1(1). Available from: <https://talentaconfseries.usu.ac.id/tm/article/view/35>.
24. Trombetti A, Reid KF, Hars M, Herrmann FR, Pasha E, Phillips EM, et al. Age-associated declines in muscle mass, strength, power, and physical performance: impact on fear of falling and quality of life. *Osteoporos Int*. [Internet]. 2016 [access in 09 oct 2018]; 27(2). Available from: <https://link.springer.com/article/10.1007%2Fs00198-015-3236-5>.
25. Araújo SP, Jardim TSV, Sousa ALLS, Silva NCF e, Souza WKS de. Jardim PCBV. Blood Pressure, Nutritional Status and Physical Activity Level Affect the Health Related Quality of Life of Oldest Old? *ClinMed*. [Internet]. 2016 [access in 09 oct 2018]; 2(2). Available from: <http://doi.org/10.23937/2469-5858/1510018>.
26. Trevizan FB, Miyazaki MC de OS, Silva YLW, Roque CMW. Quality of Life, Depression, Anxiety and Coping Strategies after Heart Transplantation. *Braz J Cardiovasc Surg*. [Internet]. 2017 [access in 09 oct 2018]; 32(3). Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5570391/pdf/rbccv-32-03-0162.pdf>.
27. Sogaro E, Schinina F, Burgisser C, Orso F, Pallante R, Aloï T, et al. Type D personality impairs Quality of Life, coping and short-term psychological outcome in patients attending an outpatient intensive program of cardiac rehabilitation. *Monaldi Arch Chest Dis - Card Ser*. [Internet]. 2010 [access in 09 oct 2020]; 74(4). Available from: <http://doi.org/10.4081/monaldi.2010.259>.
28. Susanto T, Widayati N. Quality of life of elderly tobacco farmers in the perspective of agricultural nursing: a qualitative study. *Working with Older People*. [Internet]. 2018 [access in 09 oct 2018]; 22(3). Available from: <https://www.emerald.com/insight/content/doi/10.1108/WWOP-01-2018-0002/full/html>.

Received: 24/06/2020  
Approved: 27/03/2021

Associate editor: Susanne Elero Betioli

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ISSN 2176-9133



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