



Factors Related to Elderly Anxiety in Health Problems in the Working Area of the Antara District Health Center

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Abstract: Elderly (elderly) is not a disease but an advanced stage of the process of human life, even though it is not a disease, this condition can cause physical, social and mental problems. This type of research is an analytic survey, with a cross-sectional research design. The population in this study were all elderly people living in the Work Area of the Antara Health Center. The samples taken were 34 people, which were obtained using the Accidental Sampling technique. The data obtained in this study were processed using the Chi-Square statistical test with a fisher's exact test correction. The results showed knowledge ($p=0.002$), and education ($p=0.008$), and family support ($p=0.002$). In this study it can be concluded that there is a relationship between knowledge and prevention of anxiety in the elderly in health problems, there is a relationship between education and prevention of anxiety in the elderly in health problems and there is a relationship between family support and prevention of anxiety in the elderly in health problems. Suggestions in this study are that it is hoped that health workers can provide counseling about elderly health as an effort to increase knowledge in the elderly about preventing elderly anxiety in the health problems they face and families can always provide support for the elderly.

Keywords: Elderly anxiety; Health problems; Working area

Introduction

South Sulawesi Province as one of the major provinces with an elderly population in 2007 reached 8.36 percent of the total population, this number increased to 9.05 percent in 2008 and in 2009 the number of elderly reached 8.9 percent of the entire population. The increasing number of elderly requires serious treatment because naturally the elderly experience a decline both physically, biologically and mentally and this is inseparable from economic, social and cultural problems so that there is a need for family participation and a social role in handling it (Anissa et al., 2019). The decreased function of various organs in the elderly makes them vulnerable to acute or chronic diseases (Setiorini, 2021). There is a tendency for degenerative diseases, metabolic diseases, psychosocial disorders, and infectious diseases to increase (Noorkasiani, 2009; Sudargo et al., 2021).

An increase in the elderly population can potentially cause problems that will affect other

population groups (Festy, 2018; Rohmah et al., 2012). Elderly problems will be faced by every human being and will develop into more complex problems (Salakkokoai, 2022).

Health problems or physical and/or mental health problems that often arise in the aging process (elderly) among; Disorders of blood circulation, disorders of hormonal metabolism, disorders of the joints, and various kinds of neoplasms (Anggraini, 2018). The social problem faced by the elderly (elderly) is that the existence of the elderly is often perceived negatively by the wider community (Iring, 2022). The elderly are often seen as helpless, sickly, unproductive and so on (Jannah, 2020). Not infrequently they are treated as a burden on the family, society and the State. They are often disliked and often ostracized in nursing homes. Changes in behavior in a negative direction will actually threaten harmony in the lives of the elderly or often cause serious problems in their lives (Nugroho, 2008).

Anxiety for the elderly who experience chronic illness in the face of death includes drastic changes in

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their physical condition which cause certain diseases to arise and cause anxiety such as digestive disorders, heart rate increases rapidly as a result of recurrence of the disease, often feels dizzy, sleeps badly, loss of appetite (Nugroho, 2008).

Factors that cause anxiety in the elderly who experience chronic illness in the face of death include always thinking about their illness, economic constraints, having very little time to spend with their family because their children are not in the same house/different city with the subject, thinking about their unmarried child, often feeling lonely, sometimes having trouble sleeping and lack of appetite because they always think about their illness (Festy, 2018; Santoso & Ismail, 2009).

Efforts made to overcome anxiety in the elderly who experience chronic illness in the face of death include entertaining and calming themselves by singing, praying diligently, keeping themselves busy, adjusting their diet as much as possible and filling their days by visiting their children and grandchildren (Yuliyanti, 2021). It is estimated that the number of those who suffer from this anxiety disorder, both acute and chronic, reaches 5% of the population, with a ratio between women and men of 2 to 1. And, it is estimated that between 2% -4% of the population at some point in their lives have experienced anxiety disorders (Murtiyani et al., 2018).

From the results of a study on the health condition of the elderly (elderly) conducted by the National Commission on Elderly in 10 provinces in 2006, it was found that the most common diseases suffered by the elderly were joint disease (52.3%), hypertension (38.8%), anemia (30.7%) and cataracts (23%). These diseases are the main causes of disability in the elderly. As far as the researcher's observations, the problem of anxiety in the elderly in the family cannot be understood so that there are many cases of anxiety that are not recognized, lack of appreciation is a form of support for the elderly in the family which will result in an increasing level of anxiety that occurs in the elderly.

Method

The method used in this study is an analytical survey method with a Cross Sectional Study approach (Astriani et al., 2021; Sangian et al., 2017), data analysis using alternative test with fisher's exact test correction (Norfai, 2022). The research was conducted at the Antara Health Center, Tamalanrea District, Makassar City, with a total sample of 34 respondents. The design of the research process in this study is illustrated in Figure 1.

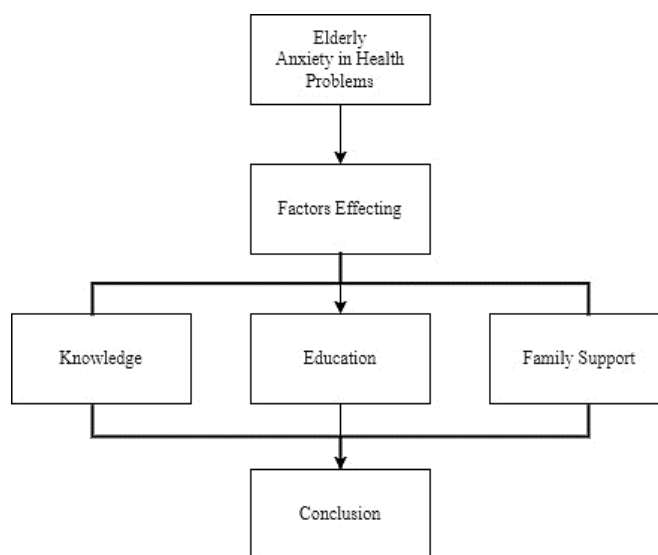


Figure 1. Research framework

Result and Discussion

Result

Characteristics of Respondents

Table 1. Data on the Characteristics of Respondents Based on the Age of the Respondents in the Work Area of the Antara Health Center, Tamalanrea District, Makassar City

Age (Years)	n	Percentage%
61 - 70	23	67.6
71 - 80	6	17.6
> 80	5	14.7
Amount	34	100

The data shows that of the 34 respondents, there were 23 (67.6%) respondents aged 61-70 years, 6 (17.6%) respondents aged 71-80 years, and 5 (14.7%) respondents aged > 80 years.

Table 2. Data on the Characteristics of Respondents Based on the Sex of the Respondents in the Working Area of the Antara Health Center, Tamalanrea District, Makassar City

Gender	n	Percentage %
Female	22	64.7
Male	12	35.3
Amount	34	100

The table shows that of the 34 respondents, there were 22 (64.7%) female respondents, and 12 (35.3%) male respondents.

Table 3. Distribution of Respondents Based on the Respondent's Disease in the Work Area of the Antara Health Center, Tamalanrea District, Makassar City

Disease	n	Percentage %
Hypertension	13	38.2
Rheumatoid arthritis	8	23.5
Gouty arthritis	5	14.7
Bronchial asthma	4	11.8
Strokes	4	11.8
Amount	34	100

There were 13 (38.2%) respondents who had hypertension, 8 (23.5%) respondents who had rheumatoid arthritis, 5 (14.7%) respondents who had gouty arthritis, 4 (11.8%) respondents who had bronchial asthma, and 4 (11.8%) had strokes.

Univariate Analysis

Table 4. The Distribution of Respondents Based on the Knowledge of Respondents in the Work Area of the Antara Health Center, Tamalanrea District, Makassar City

Knowledge	n	Percentage %
Enough	19	55.9
Not enough	15	44.1
Amount	34	100

The data shows that out of 34 respondents there were 19 (55.9%) respondents who had sufficient knowledge, and as many as 15 (44.1%) respondents whose knowledge was lacking.

Table 5. Distribution of Respondents Based on Respondent's Education in the Work Area of the Antara Health Center, Tamalanrea District, Makassar City

Education	n	Percentage %
Tall	15	44.1
Low	19	55.9
Amount	34	100

The data shows that out of 34 respondents there were 15 (44.1%) respondents with high education, and as many as 19 (55.9%) respondents with low education.

Table 6. Distribution of Respondents Based on the Support of the Respondent's Family in the Work Area of the Antara Health Center, Tamalanrea District, Makassar City

Family support	n	Percentage %
Influential	22	64.7
No effect	12	35.3
Amount	34	100

The data shows that of the 34 respondents there were 22 (64.7%) respondents whose family support was

influential, and as many as 12 (35.3%) respondents whose family support was not.

Bivariate Analysis

Table 7. The Relationship between Knowledge and Anxiety in the Elderly Regarding Health Problems in the Working Area of the Antara Health Center, Tamalanrea District, Makassar City

Knowledge	Worry				Amount	
	Able		Not able		n	%
	n	%	n	%		
Enough	16	84.2	3	15.8	19	100
Not enough	5	33.3	10	66.7	15	100
Amount	21	61.8	13	38.2	34	100

Based on the data, it shows that of the 34 respondents there were 19 respondents who had sufficient knowledge, as many as 16 (84.2%) respondents whose anxiety was capable, and as many as 3 (15.8%) respondents who were unable. Meanwhile, of the 15 respondents whose knowledge was lacking, as many as 5 (33.3%) respondents whose anxiety was capable, and as many as 10 (66.7%) respondents whose anxiety was unable. Based on the results of the chi-square statistical test between the knowledge variable and the anxiety variable, $p = 0.002$ ($\alpha = 0.05$) which means that there is a relationship between knowledge and anxiety.

Based on Table 8, it shows that of the 34 respondents there were 15 respondents who had higher education, as many as 13 (86.7%) respondents whose anxiety was capable, and as many as 2 (13.3%) respondents who were unable. While of the 19 respondents who had less education, as many as 8 (42.1%) respondents who were anxious were capable, and as many as 11 (57.9%) respondents whose anxiety was unable.

Table 8. The Relationship between Education and Elderly Anxiety about Health Problems in the Work Area of the Antara Health Center, Tamalanrea District, Makassar City

Education	Worry				Amount	
	Able		Not able		n	%
	n	%	n	%		
Tall	13	86.7	2	13.3	15	100
Low	8	42.1	11	57.9	19	100
Amount	21	61.8	13	38.2	34	100

Based on the results of the chi-square statistical test between education variables and anxiety variables, $p = 0.008$ ($\alpha = 0.05$) which means there is a relationship between education and anxiety.

Table 9. The Relationship between Family Support and Elderly Anxiety in Health Problems in the Work Area of the Antara Health Center, Tamalanrea District, Makassar City

Support family	Worry				Amount	
	Able		Not able			
	n	%	n	%	n	%
Influential	18	81.8	4	18.2	22	100
No	3	25.0	9	75.0	12	100
Amount	21	61.8	13	38.2	34	100

The data shows that out of 34 respondents there were 22 respondents who had influential family support, 18 (81.8%) respondents who were anxious were able to, and as many as 4 (18.2%) respondents who were unable. Meanwhile, of the 12 respondents whose family support had no effect, as many as 3 (25.0%) respondents whose anxiety was capable, and as many as 9 (75.0%) respondents whose anxiety was unable.

Based on the results of the chi-square statistical test with the correction of Fisher's exact test between family support variables and anxiety variables, $p = 0.002$ ($\alpha = 0.05$) which means there is a relationship between family support and anxiety.

Discussion

Based on the results of the study it was found that respondents who had sufficient knowledge in the category were more, namely 19 people (55.9%), compared to respondents who had knowledge in the less category, namely 15 people (44.1%). Based on the results of the Chi-square test, a value of $p = 0.002$ was obtained showing $p < 0.05$. This shows that there is a relationship between knowledge and anxiety of the elderly in health problems at the Antara Health Center, Tamalanrea District, Makassar City. The knowledge is the result of knowing, and this occurs after people sense a certain object. Knowledge or cognitive is a very important domain for the formation of one's actions (over behavior) (Andhika et al., 2019). Without knowledge a person has no basis for making decisions and taking action on the problems faced (Wildenbos et al., 2019).

Based on the results of the study it was found that out of 19 respondents, 16 respondents (84.2%) had sufficient knowledge to be able to cope with anxiety, this is because with knowledge a person can control himself so that he can be prevented from things that can harm him, and in this study it shows that the elderly who have sufficient knowledge are able to cope so as not to experience anxiety.

Respondents who had sufficient knowledge were unable to cope with anxiety as many as 3 respondents (15.8%), this happened because even though the knowledge possessed by the elderly was sufficient but

with the severe conditions experienced by the elderly, the respondents who experienced the most disease were hypertension, namely 13 people (38.2%), while the respondents who experienced the least disease were bronchial asthma and stroke, namely 4 people each (11.8%). there were 5 respondents (33.3%) who had less knowledge of being able to overcome anxiety, this was due to other supporting factors owned by the respondents so they were able to overcome anxiety so that there was no anxiety, where the intended supporting factors were economic factors, 10 respondents (66.7%) had less knowledge by not being able to overcome anxiety, this was due to the lack of information obtained by respondents so they did not know how to overcome anxiety so that anxiety did not occur (Lei et al., 2020).

The factors that cause anxiety in the elderly who experience chronic illness in the face of death include always thinking about the disease they are suffering from, so that it can increase anxiety in the elderly (Wong et al., 2020). The low knowledge causes a person to experience stress easily (Collado-Mateo et al., 2021). Ignorance of something is considered as pressure that can lead to a crisis and can cause anxiety. Stress and anxiety can occur in individuals with low levels of knowledge, due to the lack of information obtained (Luceño-Moreno et al., 2020).

This research is in line with research conducted by Novianti et al. (2019), regarding factors related to elderly anxiety. Where there is a significant relationship between knowledge and anxiety actions in the elderly, and the statistical test results obtained p value < 0.05 or p value = 0.000. His research explains that knowledge is very influential in determining a person's health status, especially in the elderly, where sufficient knowledge of the elderly will make it easier for the elderly to overcome their anxiety.

The results showed that there were fewer respondents who had higher education, namely 15 people (44.1%), compared to respondents who had low education, namely 19 people (55.9%). Based on the results of the Chi-square test, a value of $p = 0.008$ was obtained showing $p < 0.05$.

Based on the results of the study it was found that out of 15 respondents, 13 respondents (86.7%) had higher education who were able to overcome anxiety, this is because the level of education is also the most important thing in dealing with problems. The higher a person's education, the more life experiences he goes through, so that he will be better prepared to deal with problems that occur.

Respondents who had higher education were unable to cope with anxiety as many as 2 respondents (13.3%), this could be due to other things that cause

anxiety for the elderly to appear, which include losing something they love. Elderly who feel lost will certainly feel sad and lose control, so that the elderly will not be able to overcome their anxiety when experiencing health problems because they have no self-control over the problems they face.

The elderly experience the most prominent emotional experience when they have to deal with grief due to various losses (death of a spouse, friend, family and coworker), changes in job status and achievements, physical abilities and health. Living alone is a major stress that affects approximately 10% of the elderly, while 75% of the elderly who live alone are women.

This is in line with the opinion, this is in line with the opinion of Sastrohadiwiryo (2002) explaining that conceptually education is everything to build personality and develop human, physical and spiritual abilities that last a lifetime, both inside and outside school. While training is part of education that concerns the learning process to acquire and improve skills outside the education system that apply in a relatively short time, and with methods that prioritize practice rather than theory.

Education is essentially an activity or individual effort to convey messages to the community, groups of individuals, with the hope that with this message the community, groups or individuals can grow knowledge. Finally, this knowledge is expected to influence behavior. In other words, the existence of such education can have an impact on changes in target behavior.

Education is a process of awareness that occurs due to the interaction of various factors concerning humans and their potential, as well as the natural environment and the possibilities within. In other words, internal education is a process of awareness and self-discovery as a human being, who has maturity in thinking, acting, and behaving, so that he is able to answer various challenges in his personal and professional life (Kreijns et al., 2003). Where there is a significant relationship between education and anxiety in the elderly, and the statistical test results obtained a p value <0.05 or a p value = 0.002. His research explains that education greatly influences anxiety in the elderly, where the high education of the elderly will make it easier for the elderly to overcome their anxiety.

Respondents who received family support in the influential category were more, namely 22 people (64.7%), compared to respondents who received family support in the non-influential category, namely 12 people (35.3%). Based on the results of the study it was found that out of 22 respondents, it was found that 18 respondents (81.8%) had influential family support by being able to overcome anxiety, this was because the support from the family made the elderly feel cared for

and cared for by the family so they did not feel worried about the conditions they were experiencing, so that this would make the respondents have good coping to be able or able to overcome their anxiety (Padilla et al., 1988).

Respondents whose family support had an effect on not being able to cope with anxiety were 4 respondents (18.2%), this could be due to the physical weakness experienced by the elderly so that even though the support provided by the family had an effect on their health problems.

This is in line with the opinion of Ma'rifatul (2011) explaining that family is the main social group that has the greatest and closest emotional bond with clients. Families can do various things to provide social support: communicate with each other, look for activities and vacations. For the elderly, family is a source of satisfaction. The elderly feel that their lives are complete, namely as parents and also as grandparents. They can act in various styles, namely formal style, playing style, parental substitute style, wise style, outsider style, where each style brings advantages and disadvantages of each.

In this study, the support provided by the family is about how to maintain good communication with the elderly so that the elderly always feel cared for and cared for, which will make the elderly able to overcome their anxiety in dealing with health problems. In addition, the family also tries to provide entertainment for the elderly by inviting the elderly to be able to go together to unwind in places that please the elderly, because that will increase the confidence of the elderly in dealing with the life situations they live in.

When the family is not a part of someone's life who is elderly, it generally causes that person to have no place to live, or there are long-standing problems and alienation. In contrast, the general belief is that when an elderly person will need assistance, the family provides at least 80% support/assistance. Compared to "old age comforts", the present family provides a wider range of care over long periods of time.

Conclusion

There is a relationship between knowledge and elderly anxiety in health problems ($p=0.002$). There is a relationship between education and elderly anxiety in health problems ($p=0.008$). There is a relationship between family support and elderly anxiety in health problems ($p=0.002$).

Author Contribution

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Conflicts of Interest

The authors declare no conflict of interest.

References

- Andhika, R. F., Lismayanti, L., & Falah, M. (2019). Hubungan Tingkat Pengetahuan Lansia dengan Perilaku Hidup Bersih dan Sehat pada Lansia di Tasikmalaya. *Healthcare Nursing Journal*, 1(2). <https://doi.org/10.35568/healthcare.v1i2.980>
- Anggraini, N. (2018). Analisis Kebijakan Pemberdayaan dan Perlindungan Sosial Pada Kelompok Lanjut Usia (Lansia). *Lembaran Masyarakat: Jurnal Pengembangan Masyarakat Islam*, 4(2), 143-161. <https://doi.org/10.32678/lbrmasy.v4i2.2157>
- Anissa, M., Amelia, R., & Dewi, N. P. (2019). Gambaran tingkat depresi pada lansia di wilayah kerja Puskesmas Guguak Kabupaten 50 Kota Payakumbuh. *Health and Medical Journal*, 1(2), 12-16. <https://doi.org/10.33854/heme.v1i2.235>
- Astriani, A., Syafar, M., & Azis, R. (2021). Hubungan faktor perilaku dengan kunjungan lansia di Posbindu Lansia. *Jurnal Ilmiah Kesehatan Sandi Husada*, 10(2), 452-461. <https://doi.org/10.35816/jiskh.v10i2.630>
- Collado-Mateo, D., Lavín-Pérez, A. M., Peñacoba, C., Del Coso, J., Leyton-Román, M., Luque-Casado, A., Gasque, P., Fernández-del-Olmo, M. Á., & Amado-Alonso, D. (2021). Key factors associated with adherence to physical exercise in patients with chronic diseases and older adults: an umbrella review. *International Journal of Environmental Research and Public Health*, 18(4), 2023. <https://doi.org/10.3390/ijerph18042023>
- Festy, P. (2018). *Lanjut Usia Perspektif dan Masalah*. UM Surabaya Publishing.
- Iring, D. (2022). *Dampak modernisasi Keluarga Terhadap Penelantaran Lansia (Studi Kasus Sentra Gau Mabaji)= The Impact of Family Modernization on Elderly Neglected (A Case Study in Mabaji Gau Center) [Universitas Hasanuddin]*. Retrieved from <http://repository.unhas.ac.id/id/eprint/24031/>
- Jannah, M. (2020). Dinamika Stres, Coping dan Adaptasi dalam Resiliensi pada Lansia terhadap Permasalahan Hidup. *Al-INSAN Jurnal Bimbingan Konseling Dan Dakwah Islam*, 1(1), 32-55. Retrieved from [http://download.garuda.kemdikbud.go.id/article.php?article=2416468&val=23067&title=Dinamika a Stres Coping dan Adaptasi dalam Resiliensi pada Lansia terhadap Permasalahan Hidup](http://download.garuda.kemdikbud.go.id/article.php?article=2416468&val=23067&title=Dinamika%20Stres%20Coping%20dan%20Adaptasi%20dalam%20Resiliensi%20pada%20Lansia%20terhadap%20Permasalahan%20Hidup)
- Kreijns, K., Kirschner, P. A., & Jochems, W. (2003). Identifying the pitfalls for social interaction in computer-supported collaborative learning environments: a review of the research. *Computers in Human Behavior*, 19(3), 335-353. [https://doi.org/10.1016/S0747-5632\(02\)00057-2](https://doi.org/10.1016/S0747-5632(02)00057-2)
- Lei, L., Huang, X., Zhang, S., Yang, J., Yang, L., & Xu, M. (2020). Comparison of prevalence and associated factors of anxiety and depression among people affected by versus people unaffected by quarantine during the COVID-19 epidemic in Southwestern China. *Medical Science Monitor: International Medical Journal of Experimental and Clinical Research*, 26, e924609-1. <https://doi.org/10.12659/MSM.924609>
- Luceño-Moreno, L., Talavera-Velasco, B., García-Albuérne, Y., & Martín-García, J. (2020). Symptoms of posttraumatic stress, anxiety, depression, levels of resilience and burnout in Spanish health personnel during the COVID-19 pandemic. *International Journal of Environmental Research and Public Health*, 17(15), 5514. <https://doi.org/10.3390/ijerph17155514>
- Ma'rifatul, A. L. (2011). *Keperawatan lanjut usia*. Graha Ilmu, Yogyakarta.
- Murtiyani, N., Lestari, Y. A., Suidah, H., & Okhfarisi, H. R. (2018). Pengaruh Senam Yoga Terhadap Depresi Pada Lansia Di Upt Pelayanan Sosial Lanjut Usia Pasuruan, Lamongan. *Nurse and Health: Jurnal Keperawatan*, 7(1), 23-30. <https://doi.org/10.36720/nhjk.v7i1.29>
- Noorkasiani, S. T. (2009). *Kesehatan usia lanjut dengan pendekatan asuhan keperawatan*. Jakarta: Salemba Medika.
- Norfai, S. K. M. (2022). *Analisis data penelitian (Analisis Univariat, Bivariat dan Multivariat)*. Penerbit Qiara Media.
- Novianti, A., Ulfi, E., & Hartati, L. S. (2019). Hubungan jenis kelamin, status gizi, konsumsi susu dan olahannya dengan kadar asam urat pada lansia. *Jurnal Gizi Indonesia (The Indonesian Journal of Nutrition)*, 7(2), 133-137. <https://doi.org/10.14710/jgi.7.2.133-137>
- Nugroho, W. (2008). *Gerontik dan Geriatrik*. Jakarta: EGC.
- Padilla, A. M., Cervantes, R. C., Maldonado, M., & Garcia, R. E. (1988). Coping responses to psychosocial stressors among Mexican and Central American immigrants. *Journal of Community Psychology*, 16(4), 418-427. [https://doi.org/10.1002/1520-6629\(198810\)16:4<418::AID-JCOP2290160407>3.0.CO;2-R](https://doi.org/10.1002/1520-6629(198810)16:4<418::AID-JCOP2290160407>3.0.CO;2-R)
- Rohmah, A. I. N., Bariyah, K., & others. (2012). Kualitas hidup lanjut usia. *Jurnal Keperawatan*, 3(2). <https://doi.org/10.22219/jk.v3i2.2589>

- Salakkokoai, M. (2022). *Hubungan Tingkat Kecemasan Dengan Arthritis Gout Pada Lansia Di Puskesmas Andalas Padang Tahun 2022* [Sekolah Tinggi Ilmu Kesehatan Alifah Padang]. Retrieved from <http://repo.stikesalifah.ac.id/id/eprint/469/>
- Sangian, L. M. L., Wowiling, F., & Malara, R. (2017). Hubungan Dukungan Emosional Keluarga Dengan Penerimaan Diri Pada Lansia Di Desa Watutumou III. *Jurnal Keperawatan*, 5(2). <https://doi.org/10.35790/jkp.v5i2.16841>
- Santoso, H., & Ismail, H. (2009). *Memahami krisis lanjut usia*. BPK Gunung Mulia.
- Sastrohadiwiryo, B. S. (2002). *Manajemen tenaga kerja Indonesia: Pendekatan administratif dan operasional*. Bumi aksara.
- Setiorini, A. (2021). Kekuatan otot pada lansia. *Jurnal Kedokteran Universitas Lampung*, 5(1), 69–74. <https://doi.org/10.23960/jkunila5169-74>
- Sudargo, T., Aristasari, T., Prameswari, A. A., Ratri, F. A., Putri, S. R., & others. (2021). *Asuhan Gizi Pada Lanjut Usia*. UGM PRESS.
- Wildenbos, G. A., Jaspers, M. W. M., Schijven, M. P., & Dusseljee-Peute, L. W. (2019). Mobile health for older adult patients: Using an aging barriers framework to classify usability problems. *International Journal of Medical Informatics*, 124, 68–77. <https://doi.org/10.1016/j.ijmedinf.2019.01.006>
- Wong, S. Y. S., Zhang, D., Sit, R. W. S., Yip, B. H. K., Chung, R. Y., Wong, C. K. M., Chan, D. C. C., Sun, W., Kwok, K. O., & Mercer, S. W. (2020). Impact of COVID-19 on loneliness, mental health, and health service utilisation: a prospective cohort study of older adults with multimorbidity in primary care. *British Journal of General Practice*, 70(700), e817–e824. <https://doi.org/10.3399/bjgp20X713021>
- Yuliyanti, E. D. (2021). *Hubungan Antara Persepsi Terhadap Kematian Dengan Kecemasan Menghadapi Kematian Pada Lanjut Usia* [Universitas Islam Sultan Agung Semarang]. Retrieved from <http://repository.unissula.ac.id/24247/>