Available online at: http://e-jurnal.lppmunsera.org/index.php/parahita
Wikrama Parahita: Jurnal Pengabdian Masyarakat
p-ISSN 2599-0020, e-ISSN 2599-0012

Self-Empowerment of The Elderly in Depression Reduction Through Laughter Therapy

Dewi Utari[1*], Rizqi Wahyu Hidayati[1], Sugiyono[2], Dewi Retno Pamungkas[1]
[1]Department of Nursing, Universitas Jenderal Achmad Yani Yogyakarta, Jl. Brawijaya, West Ring Road, Yogyakarta 55294, Indonesia
[2]Department of Pharmachology, Universitas Jenderal Achmad Yani Yogyakarta, Jl. Brawijaya, West Ring Road, Yogyakarta 55294, Indonesia

Article Information

Article history

Received: September 1, 2024
Revised: May 20, 2025
Accepted: May 20, 2025

Keywords: Depression; Elderly; Laughter Therapy; Self-Empowerment

Abstract

The ageing process brings many physical, psychological, social and spiritual changes to older people. Psychological and social changes include a different work rhythm due to retirement, loss of friends and partners, fear and anxiety about death, loneliness, etc. This leads to the risk of anxiety and depression in older people. Depression or psychosocial disorders affect older people physically and might reduce their quality of life. Therefore, in order to prevent and overcome these problems, an intervention is needed through laughter therapy. This community service activity consists of five stages, starting from problem identification to program sustainability follow-up. The participants of this activity were 37 elderly members of the hypertension class of Kalasan Puskesmas Area. The activity method consists of 5 stages. The elderly are empowered to practice laughter therapy, which is evaluated using the Geriatric Depression Scale (GDS) questionnaire. The results of the activity showed that the elderly had the ability to perform the therapy independently and that the results of the activity were able to reduce depression levels. In the pre-test assessment, 14.3% of respondents in the middle-aged group exhibited a severe level of depression. Meanwhile, the elderly and young-old groups demonstrated moderate levels of depression, with prevalence rates of 21.1% and 27.3%, respectively. Post-test findings indicated a positive shift across all three groups, with a reduction in depression severity. The proportion of individuals experiencing moderate depression decreased to 14.3% in the middle-aged group, 5.3% in the elderly group, and 9.1% in the young-old group.

*Corresponding Author

Dewi Utari
E-mail: dewiut1402@gmail.com

© 2025 Some rights reserved

INTRODUCTION

Older people experience many changes not only physically but also in terms of socio-economic problems and mental changes, such as older people retiring from work, losing a partner in old age, and losing friends (Öztürk *et al.*, 2023). Mental health changes that occur sometimes have an impact on the elderly, including a personality that becomes different or the elderly experience low self-esteem, as well as behavior that shows fear, depression, insecurity or not feeling confident, and confusion (Jamilah *et al.*, 2015). This makes the elderly prone to mental and psychological disorders such as anxiety and depression. Erwanto, Herlina, and Fitri in their research stated that 40% of the elderly experienced mild depression, 38% moderate depression, and 4% severe depression (Erwanto *et al.*, 2023). Meanwhile, Rachmawati *et al*. wrote that 88% of elderly people in Prolanis experienced mild depression and 12% moderate depression (Rachmawati *et al.*, 2023). Based on these two journals, it can be seen that the prevalence of depression in the elderly is high, which is more than 80%.

This depressive state is closely linked to physical problems. Older people with 2 or more physical health problems are more likely to develop depression. This is because the functioning of physical organs such as the heart and hormones can affect the mental health of older people. In addition, the inability of older people to adapt to treatment and disease management can also increase the risk of depression. Furthermore, this depression can worsen

© 2025 All forms of plagiarism and misuse of intellectual property rights due to the publication of this community service paper are the responsibility of the author.

DOI: https://dx.doi.org/10.30656/jpmwp.v9i1.9361

the quality of life of older people (Kaur *et al*., 2022; Sari, 2023; Utami *et al*., 2018; Wibowo *et al*., 2021). The results of the research by Andrini, Kurniawati, and Lubis wrote that the level of depression is closely related to the quality of life of the elderly with a correlation value of 0.530, where 43.1% of elderly people who have poor quality of life experience both mild and moderate depression (Andriani *et al*., 2023).

Efforts to improve the quality of life of older people can be carried out through various promotive strategies, one of which is the provision of laughter therapy (Sinaga, 2020). Laughter therapy has been shown to be an effective non-pharmacological intervention for reducing depression among the elderly due to several physiological and psychological mechanisms. Firstly, laughter stimulates the release of endorphins, the body's natural of a feel-good chemical, which promote a sense of well-being and temporarily relieve pain. This biochemical response can help counteract the neurochemical imbalances often associated with depression. Secondly, laughter reduces the level of stress hormones such as cortisol and adrenaline, thereby lowering stress and anxiety, which are common contributing factors to depression in older adults. Additionally, laughter promotes relaxation and improves sleep quality, both of which play a critical role in emotional regulation. Socially, laughter therapy encourages interaction, social bonding, and a sense of belonging. Given that social isolation and loneliness are significant risk factors for depression in the elderly, the communal aspect of laughter therapy can have a protective effect on mental health. Moreover, engaging in laughter can improve cognitive function and foster a more positive outlook on life, enabling older adults to better cope with age-related challenges. Taken together, these effects demonstrate that laughter therapy is a holistic and accessible approach to enhancing emotional well-being and reducing depressive symptoms in the elderly population. Therefore, this therapy can have a significant positive impact on the elderly, including improving the quality of sleep in the elderly, stabilizing hypertension in the elderly, reducing stress, anxiety and depression, increasing life satisfaction, reducing loneliness and improving the quality of life of the elderly (Bete *et al*., 2022; Dewi, 2018; Freanti *et al*., 2023; Heidari *et al*., 2020; Idris & Astarani, 2019; Jamilah *et al*., 2015; Kuru Alici & Zorba Bahceli, 2021; Nurwela *et al*., 2017; Safarina *et al*., 2022).

Most of the elderly in the Kalasan Puskesmas area have been monitored by the Puskesmas through a program called Hypertension Class. The activities organised in this program are routine physical health checks once a month. The accompanying activities besides the health checks are education. However, the education that has been provided focusses only on physical problems. According to the hypertension class leader, there are still many older people who are not fully aware of prevention and health promotion activities. This is evidenced by the fact that the number of older people attending hypertension classes is stagnating rather than increasing. In addition, prevention and health promotion activities in hypertension classes have not yet addressed psychological problems.

Laughter therapy, which is one of the simple and inexpensive therapies that have been proven to improve the quality of life of the elderly, is one of the right choices to be able to introduce a type of intervention that is easy to implement while helping the elderly to overcome problems, especially psychological problem (Öztürk *et al*., 2023). The results of the initial survey on the level of depression showed that 78.4% of the elderly had mild depression, 16.2% had moderate depression, and 2.7% had severe depression. Therefore, the long-term goal of this service is that the elderly who are members of the Kalasan Puskesmas Hypertension Class will be able to improve their quality of life by reducing their depression levels through laughter therapy, which is easy to implement.

MATERIALS AND METHODS

This community service targets the Hypertension Class group under the guidance of the Kalasan Health Centre. Thirty-seven elderly people attended the activity, and it took place in the Hypertension Class Hall of Krajan Kalasan. The method given was through hands-on practice of laughter therapy. The intervention was generated based on the problems in the hypertension class community (Table 1).

Table 1. Solution of dedication

Problem	Solution	Output
Based on the results of the psychological status screening, it was found that many older people were suffering from depression.	There is a need for a specific intervention to reduce the level of depression among older adults.	Educational videos on laughter therapy should be produced as a tool to be delivered to older adults.
In this hypertension class, there was no activity focusing on psychological problems. Instead, the focus was on physical problems.	Therefore, activities are needed that can reduce psychological problems and are inexpensive and technically simple.	Add laughter therapy to the list of activities and routine psychological check-ups that can be reported to the health care center.

DOI: https://dx.doi.org/10.30656/jpmwp.v9i1.9361

Several preparatory and coordinating steps are needed to make these activities work, consisting of several stages. The first stage is problem identification and socialisation. The team identified the problem by screening for depression in older people using the Geriatric Depression Scale sheet. These results form the basis for indicators of the success of the activity. In addition, initial data, such as the number of older people actively participating in the hypertension classes and activities that have been run so far, We also carried out a physical examination to check blood sugar, cholesterol, and uric acid levels. Meanwhile, socialisation is carried out by the person in charge of the hypertension class, who makes announcements and lists participants via the WhatsApp group.

The second stage of training offered to reduce depression in older people is laughter therapy. This laughter therapy is carried out with the guidance of the video. Activities last about 25-30 minutes. At the same time, the third stage involves the application of science and technology in this activity, which is manifested by the team that provides therapy with video media. The video results from visualizing the Standard Operating Procedure (SOP) of laughter therapy. It is hoped that through audio and visual media, the elderly will find it easier to imitate and practice laughter therapy.

The fourth stage is supervision and evaluation. The team also includes students who act as facilitators, accompanying the elderly during the therapy. Their tasks include guiding the participants, modelling movements, and providing support. For example, the session may involve clapping, deep breathing techniques, shoulder and head movements, and waist rotations, followed by laughter practices, including the lion laughter exercise. Meanwhile, the evaluation process is carried out using the same questionnaire to measure the level of depression in the elderly.

Finally, the fifth stage is the sustainability of the program. The community service program in the elderly hypertension class is continuous, which means a teacher will do the service in the same place every month until September. So, this can be used as an activity to see whether or not the therapies that have been carried out can continue to be carried out by the elderly.

RESULTS AND DISCUSSION

Community service has been carried out by 37 elderly people who participated in the Hypertension Class program under the guidance of Puskesmas Kalasan Yogyakarta. Most elderly people actively participate in the Posyandu and hypertension class, which is held once a month on the third Saturday of the month. However, this laughter therapy was only carried out twice.

Fig. 1 is a documentation of the laughter therapy practice activity. The therapy was led by students who were part of the community service team, and some older people who arrived late were only examined (Fig. 2).

Fig. 1. The practice of laughter therapy

Fig. 2. Laughter practice assistance

Laughter therapy does not have any specific requirements in terms of physical condition, nor does it have any contraindications. Therefore, no special physical examination is required to ensure the elderly can participate in laughing therapy. We must consider some of the movements modified in this laughter therapy. It is not a problem if the elderly cannot perform the movements optimally. The important thing is that they can express their feelings and thoughts through laughter therapy.

Table 2 shows that most are older or between 55 and 64 years old (51.4%) and have a high school education (43.3%). Regarding marital status, most service participants are still married (70.3%) and female (83.8%). Some participants have chronic illnesses, mainly hypertension (46.0%), with most having been ill for <1-3 years (42.8%).

Overall, laughter therapy was successful in decreasing the depression level for most of the older people, although some were at the same level of depression (Table 3). Several factors may explain why some respondents did not experience a reduction in depressive symptoms following laughter therapy. Individual differences in psychological resilience, openness to the intervention, and baseline mental

DOI: https://dx.doi.org/10.30656/jpmwp.v9i1.9361

health status can influence therapeutic outcomes. For instance, participants with more severe or long-standing depression may require a longer duration or a combination of interventions to show significant improvement. Personal attitudes toward laughter therapy, such as scepticism, discomfort, or lack of engagement, may also limit its effectiveness. Despite all of those aspects, these results are consistent with the study conducted by Nurlela, Mahajudin, and Adiningsih, who also experienced a change at the initial test; namely, 68.4% of the respondents were at a mild level, and after the laughter therapy intervention, 84.2% of the respondents were normal (Nurwela *et al*., 2017).

In the case of the one respondent whose depression level increased after the intervention, this could be attributed to external factors unrelated to the therapy itself. These may include recent stressful life events, physical health deterioration, or interpersonal conflicts during the intervention. Such factors could overshadow the benefits of laughter therapy and lead to a worsening of depressive symptoms. Factors that may increase depression include being female, older age, partner status, education level, economic level and health condition. One factor found in 1 hypertensive participant who experienced increased depression was health. He had eye problems for 5 years and heart problems for 3 years. In this service, it was found that most participants were older (51.4%). Based on several studies, it can be concluded that the older a person is, the higher the risk of experiencing health problems, both physical and mental (Öztürk *et al*., 2023; Septianawati *et al*., 2022).

In terms of educational level, most of the participants were high school graduates (43.3%). Educational level is related to older people's ability to receive and process information. The higher the level of education, the more open they are to new information, including health education (Ahmadiyanto *et al*., 2016; Freanti *et al*., 2023; Ghodsbin *et al*., 2015). Marital status is also one of the factors associated with depression. The majority of older people in this service are still married (70.3%). Someone who still has a partner or family usually receives support from the family. Meanwhile, family support is statistically associated with the level of depression in older people (Ahmadiyanto *et al*., 2016; Teting *et al*., 2022).

Table 2. The Characteristics of the respondents

Respondent's characteristics	Frequency (f)	Percentage (%)
Age		
45 – 54 (Middle Age)	7	18.9
55 – 64 (Elderly)	19	51.4
65 – 74 (Young Old)	11	29.7
Education		
Uneducated	1	2.7
Elementary	4	10.8
Junior high school	7	18.9
Senior high school	16	43.3
Diploma degree	1	2.7
Bachelor degree	7	18.9
Master degree	1	2.7
Marital status		
Marriage	26	70.3
Widow/ Widower	11	29.7
Gender		
Male	6	16.2
Female	31	83.8
Chronical illness		
Hypertension	17	46.0
Diabetic Melitus (DM)	6	16.2
Both	5	13.5
Others	6	16.2
None	3	8.1
Duration of illness (year)		
<1 – 3	12	42.8
4 – 6	8	28.6
7 – 10	1	3.6
11 – 15	3	10.7
>15	4	14.3

DOI: https://dx.doi.org/10.30656/jpmwp.v9i1.9361

Table 3. Comparison of depression levels in older people before and after laughter therapy

Initial Condition	Intervention	Condition Change
Middle Age Group Normal 0% Mild 71.4% Moderate 14.3% Severe 14.3%	Laughter therapy took place twice over a two-month period and lasted approximately 5 to 10 minutes for each session.	Normal 0% Mild 85.7% Moderate 14.3% Severe 0% Only older people with severe depression showed changes, decreasing to mild. Five people with mild levels and one with moderate levels showed no change.
Elderly Group Normal 0% Mild 78.9% Moderate 21.1% Severe 0%	The same as above	Normal 21.1% Mild 73.7% Moderate 5.3% Severe 0% Among those with a change, three went from moderate to mild and four from mild to normal. 12 older people showed no change, 11 who remained mild and 1 who remained moderate.
Young Old Group Normal 0% Mild 72.7% Moderate 27.3% Severe 0%	The same as above	Normal 9.1% Mild 81.9% Moderate 9.1% Severe 0% Looking at how this group changed, 6 people remained mildly depressed. 3 people dropped from moderate to mild, and 1 person from mild to normal. The one older woman who went from mild to moderate.

The majority of participants in this community service are women (83.8%). Based on the data obtained, women's life expectancy is higher than men's, which allows women to be more active. As a result, women tend to have higher stress levels than men (Heidari *et al.*, 2020). However, some studies mention that women are three times more at risk compared to men because it is related to their roles and duties (Ahmadiyanto *et al.*, 2016; Jamilah *et al.*, 2015; Sari, 2023). However, other studies suggest that gender has nothing to do with the risk of depression (Kaur *et al.*, 2022).

According to the group details, the middle age group showed a clear improvement in depression severity. The severe category dropped completely from 14.3% to 0%, with those individuals moving into the mild category (which increased from 71.4% to 85.7%). Moderate levels stayed the same, while no respondents reached the normal level. It suggests that laughter therapy effectively reduced severe depression in this group, shifting people towards milder symptoms. The elderly group demonstrated significant improvement, with 21.1% of respondents moving from moderate depression to normal. The moderate category decreased markedly from 21.1% to 5.3%, indicating a positive change in the intervention. Mild depression rates decreased slightly, likely because some participants improved to normal status. The young old group also improved, with the proportion of normal respondents increasing from 0% to 9.1%. Mild depression increased, while moderate depression decreased significantly from 27.3% to 9.1%. No respondents experienced severe depression. This pattern indicates an overall reduction in depression severity, with many moving from moderate to mild or normal.

Another factor that contributes to the prevalence of depression in older people is the presence of comorbidities or chronic conditions. The ageing process causes a decline in the functioning of all organs in older people. It makes older people very vulnerable to physical health problems. Some physical health problems include reduced hearing, vision, and cognitive function, as well as chronic diseases such as hypertension, diabetes mellitus, stroke, and others. Older people with chronic diseases are more likely to have mental disorders, or vice versa; older people with mental disorders may also have an impact on physical disorders. Older people with chronic diseases have a 4.52 times higher risk of moderate depression. Ultimately, all these changes can reduce the quality of life of older people (Freanti *et al.*, 2023; Ghodsbin *et al.*, 2015; Kaur *et al.*, 2022; Öztürk *et al.*, 2023; Rachmawati *et al.*, 2023).

This service aims to improve quality of life by reducing depression levels through laughter therapy. Laughter therapy has been widely used to reduce anxiety, stress levels, insomnia, and blood pressure. This therapy is not only used in all age groups, including the elderly. In addition, several studies also mention that laughter therapy is effective in reducing

depression levels (Freanti et al., 2023; Ghodsbin *et al.*, 2015; Heidari *et al.*, 2020; Idris & Astarani, 2019; Nurwela *et al.*, 2017; Rosmin Ilham *et al.*, 2022; Safarina *et al.*, 2022; Wibowo *et al.*, 2021). Furthermore, laughter therapy improves the quality of life and life satisfaction in older people (Kuru Alici & Zorba Bahceli, 2021; Öztürk *et al.*, 2023)

Laughter therapy tends to be easy because it does not require complicated tools or equipment. It makes it easier for someone to practice it anywhere at any time, under normal conditions. Laughter therapy is a mental or emotional expression shown through facial and vocal expressions. Laughter is a response to a certain stimulus, which can be seen in a happy expression or a feeling of pleasure. When you laugh, stress hormones decrease and feelings of happiness increase. This is because the increase in endorphins produced by laughter will positively impact a person (Freanti *et al.*, 2023; Safarina *et al.*, 2022).

CONCLUSION

The laughter therapy was effective in reducing depression levels in 32.4% of the participants who attended the hypertension classes. Although the intervention showed a reduction in depression severity, particularly in eliminating severe depression, none of the respondents in the middle-aged group reached the normal category, suggesting that laughter therapy alone may not be sufficient for full recovery in this subgroup. The degree of improvement also varied across age groups, indicating possible age-related or individual differences in therapeutic responsiveness. While demographic data were collected, the relatively small sample size (n = 37) may still limit the statistical power and generalizability of the findings to larger populations. Additionally, the absence of a control group restricts the ability to attribute improvements exclusively to laughter therapy, as other factors may have contributed. The study also focused on short-term outcomes without assessing long-term effects (only carried out twice over 2 months), and potential bias from self-reported measures may affect the accuracy of depression-level assessments. The changes may be greater if the therapy can be carried out continuously and consistently. For this reason, this therapy should be practised by older people both on their own and together in hypertension classes. It is also necessary to monitor the physical condition of the elderly, as this is a factor that influences the psychological condition of the elderly.

ACKNOWLEDGEMENTS

We would like to thank the University of Jenderal Achmad Yani Yogyakarta for providing the funds to carry out this community service and the Kalasan Community Health Centre for their excellent cooperation.

REFERENCES

Ahmadiyanto, T. F. B. P., Sasmito, L., & Hadidi, K. (2016). Hubungan dukungan keluarga dengan tingkat depresi pada lansia di PSLU Bondowoso. *Urnal Kesehatan Dr. Soebandi*, *4*(1), 238–244. https://journal.uds.ac.id/index.php/jkds/article/view/57

Andriani, A., Kurniawati, D., & Lubis, K. A. S. (2023). Hubungan tingkat depresi dengan kualitas hidup (quality of life) pada lansia penderita hipertensi di wilayah kerja Puskesmas Rasimah Ahmad Bukittinggi. *Jurnal Ners*, *7*(1), 48–52. https://doi.org/10.31004/jn.v7i1.8345

Bete, D., Kurniyanti, M. A., & Mayasari, S. I. (2022). Terapi Tertawa Terhadap Tekanan Darah Pada Lansia Dengan Hipertensi. *Jurnal Keperawatan*, *14*(3), 719–729. https://journal2.stikeskendal.ac.id/index.php/keperawatan/article/view/271

Dewi, E. U. (2018). Terapi Tertawa Terhadap Tingkat Stres Pada Lansia Di Rw 06 Kelurahan Darmo Surabaya. *Jurnal Keperawatan*, *7*(1), 1–7. https://doi.org/10.47560/kep.v7i1.115

Erwanto, F., Herlina, H., & Fitri, A. (2023). Gambaran Tingkat Depresi Pada Lansia di Wilayah Kerja Puskesmas Sidomulyo Rawat Jalan. *Jurnal Vokasi Keperawatan (JVK)*, *6*(1), 28–35. https://doi.org/10.33369/jvk.v6i1.25417

Freanti, P., Susanto, T., & Kurdi, F. (2023). Application of Laughter Therapy for the Quality of Life of the Elderly: Literature Review. *Jurnal Kesehatan Komunitas Indonesia*, *3*(2), 201–216. https://doi.org/10.58545/jkki.v3i2.155

Ghodsbin, F., Sharif Ahmadi, Z., Jahanbin, I., & Sharif, F. (2015). The Effects of Laughter Therapy on General Health of Elderly People Referring to Jahandidegan Community Center in Shiraz, Iran, 2014: A Randomized Controlled Trial. *IJCBNM January*, *3*(1). https://pubmed.ncbi.nlm.nih.gov/25553332/

Heidari, M., Ghodusi Borujeni, M., Rezaei, P., Kabirian Abyaneh, S., & Heidari, K. (2020). Effect of Laughter Therapy on Depression and Quality of Life of the Elderly Living in Nursing Homes. *Malaysian Journal of Medical Sciences*, *27*(4), 119–129. https://doi.org/10.21315/mjms2020.27.4.11

Idris, D. N. T., & Astarani, K. (2019). Efektivitas Terapi Tertawa tehadap Insomnia dan Tekanan Darah pada Lansia. *Jurnal Ners Dan Kebidanan (Journal of Ners and Midwifery)*, *6*(3), 339–347. https://doi.org/10.26699/jnk.v6i3.ART.p339-347

Jamilah, Fahdi, F. K., & Sukarni. (2015). Pengaruh Pemberian Terapi Tertawa Terhadap Tingkat Stres Pada Lansia Di Upt Panti Sosial Rehabilitasi Lanjut Usia Mulia Dharma Provinsi Kalimantan Barat. *ProNers*, *3*(1), 1–11. https://jurnal.untan.ac.id/index.php/jmkeperawatanFK/article/view/42323

Kaur, J., Dayanand, A., & Kumaran, M. (2022). Laughter Therapy On Stress Among Elderly at Selected Old Age Home of Himachal Pradesh. *Zeichen Journal*, *8*(11), 104–117.

DOI: https://dx.doi.org/10.30656/jpmwp.v9i1.9361

https://drive.google.com/file/d/1l6JmdVPJjvC6Lmbi9bmPRAcJnzbpwf6y/view

Kuru Alici, N., & Zorba Bahceli, P. (2021). Effects of Laughter Therapy on Life Satisfaction and Loneliness in Older Adults Living in Nursing Homes in Turkey: A Parallel Group Randomized Controlled Trial. *Rehabilitation Nursing*, *46*(2), 104–112. https://doi.org/10.1097/RNJ.0000000000000266

Nurwela, T. S., Mahajudin, M. S., & Adiningsih, S. (2017). The effectiveness of laugh therapy to decrease depression level in the elderly at Griya Usila st. Yosep Surabaya and panti werdha Bhakti Luhur Sidoarjo. *Jurnal Ilmiah Kedokteran Wijaya Kusuma*, *4*(1), 62–76. https://doi.org/10.30742/jikw.v4i1.20

Öztürk, F. Ö., Bayraktar, E. P., & Tezel, A. (2023). The effect of laughter yoga on loneliness, psychological resilience, and quality of life in older adults: A pilot randomized controlled trial. *Geriatric Nursing*, *50*, 208–214. https://doi.org/10.1016/j.gerinurse.2023.01.009

Rachmawati, F., Z, D., Muttaqin, Z., & Muryati, M. (2023). Analisis Faktor Penyebab Depresi pada Lansia: Riwayat Penyakit, Interaksi Sosial dan Dukungan Keluarga. *Jurnal Keperawatan Indonesia Florence Nightingale*, *3*(2), 8–16. https://doi.org/10.34011/jkifn.v3i2.1782

Rosmin Ilham, Hamna V. Lasanuddin, Devi Lestari, Muh Hidayanto, & Sriharyani H. Eksan. (2022). Efektivitas terapi tertawa untuk menurunkan tingkat kecemasan pada lansia di Panti Griya Lansia Jannati Kota Gorontalo. *Jurnal ABDIMAS Panrita*, *3*(2), 28–32. https://doi.org/10.37362/jap.v3i2.864

Safarina, L., Aini, F. N., Rudyana, H., Firza, T., & Roswendi, A. S. (2022). The Effects of Laughter Therapy (Humor) on Mild Depression in the Elderly at Balai Perlindungan Sosial Tresna Werdha Ciparay Bandung. *Malaysian Journal of Medicine and Health Sciences*, *18*(17), 103–107. https://medic.upm.edu.my/upload/dokumen/20230110416295017_2021_1657.pdf

Sari, Y. I. P. (2023). Pengaruh Terapi Tertawa Terhadap Tingkat Kecemasan Pada Lansia di UPTD Pelayanan Sosial Lanjut Usia Tresna Werdha Lampung. *Jurnal Ners*, *7*(1), 309–315. https://doi.org/10.31004/jn.v7i1.12058

Septianawati, P., Mustikawati, I. F., Kusuma, I. R., & Maulana, A. M. (2022). Karakteristik Lansia dan Kejadian Depresi di Panti Pelayanan Sosial Lanjut Usia (PPSLU) Sodagaran Banyumas. *Muhammadiyah Journal of Geriatric*, *3*(2), 36. https://doi.org/10.24853/mujg.3.2.36-45

Sinaga, M. R. E. (2020). The Effectiveness of the Intervention Depression in the Elderly: A Systematic Review. *Jurnal Keperawatan Jiwa*, *8*(4), 529–540. https://doi.org/10.26714/jkj.8.4.2020.529-540

Teting, B., Yani, Y., & Jho, Y. L. (2022). Dukungan keluarga dan tingkat depresi pada lansia di kelompok lansia St. Angela Samarinda. *Sebatik*, *26*(1), 81–86. https://doi.org/10.46984/sebatik.v26i1.1679

Utami, A. W., Gusyaliza, R., & Ashal, T. (2018). Hubungan Kemungkinan Depresi dengan Kualitas Hidup pada Lanjut Usia di Kelurahan Surau Gadang Wilayah Kerja Puskesmas Nanggalo Padang. *Jurnal Kesehatan Andalas*, *7*(3), 417–423. https://doi.org/10.25077/jka.v7i3.896

Wibowo, D. A., W. S., W., & Amelia, N. (2021). The Effect of Laughter Therapy for Depression Level among Geriatric Patients at Pangesti Lawang Nursing Home. *International Journal of Nursing and Health Services (IJNHS)*, *4*(5), 515–521. https://ijnhs.net/index.php/ijnhs/article/view/507