



Application of Laughter Therapy for the Quality of Life of the Elderly: Literature Review

Tri Freanti Putri^{1*}, Tantut Susanto², Fahrudin Kurdi²

¹ Faculty of Nursing, University of Jember, Jember, Indonesia


² Department of Community Health Nursing and Gerontic Nursing, Faculty of Nursing, University of Jember, Indonesia

Article History

Submitted: 30-06-2023

Revised: 07-08-2023

Accepted: 08-08-2023

 doi.org/10.58545/jkki.v3i2.155

Copyright (c) 2023
Tri Freanti Putri

This is an open-access article under the CC-BY-SA License.



Abstract

Introduction: The quality of life of the elderly is influenced by two important aspects, namely education and health where around 24% of 100 elderly experience health problems, where aging in the elderly causes a decrease in the body's reserve capacity and an increased risk of disease. One of the therapies that can be used to improve the quality of life of the elderly is namely laughter therapy which is useful in relieving disease symptoms, such as fatigue so as to improve the quality of life of the elderly. **Objective:** This study aims to identify the laughter therapy application that provides information about concepts and relevant data related to the topic of using laughter therapy in fulfilling the quality of life of the elderly. **Method:** The design of this study is using a literature review of articles using the search engine database of PubMed, SpringerLink, ScienceDirect, Google Scholar and Wiley Online Library using PRISMA flowchart. **Results:** The results are showed from this study are that five articles met both the criteria of inclusion and exclusion. After being given by laughter therapy intervention, have a positive impact on reducing symptoms of depression and anxiety which can affect survival in old age related with elderly's quality of life. **Conclusion:** This study could conclude that using laughter therapy could increase quality of life of the elderly during aging process included to every aspect such as psychological, physical, social and environmental adaptation.

Keywords: Elderly, Laughter Therapy, Quality of Life

Correspondence

Tri Freanti Putri,
Faculty of Nursing, University of Jember, Indonesia
Jl. Kalimantan No.37, Sumbersari, Kabupaten Jember, Jawa Timur 68121
email: trifreantipg@gmail.com

How to cite:

Putri, T.F., 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>

I. BACKGROUND

Globally, the elderly population (over 60 years) in the world is currently in the era of growing population of 7% of the total population (Ministry of Health, Republic of Indonesia, 2017). The percentage of elderly people in Indonesia

has doubled in 2020 by 9.92% with a total of around 26 million of the entire population of Indonesia. Furthermore, the increase in the number of elderly populations needs to be balanced with an increase in the quality of life of the elderly (Nurhidayati et al., 2021a). The quality of

life of the elderly is influenced by two important aspects, namely education and health (Central Bureau of Statistics, 2020). Around 24% of 100 elderly people in 2020 experience health problems (Central Bureau of Statistics, 2020). Aging in the elderly causes a decrease in body reserve capacity and an increased risk of disease (Susanto & Widayati, 2018).

On the other hand, an increase in the number of elderly people has an impact on increasing the dependence of the elderly, because they experience setbacks in physical, economic, social and psychological health (Sitanggang et al., 2021). The decline that occurs in the elderly is described through four stages, such as weakness, functional limitations, disability, and inhibition. These four stages will be experienced simultaneously with the process of decline due to the aging process (Nurhidayati et al., 2021b). Therefore, the elderly are at risk of being susceptible to injury and decreased quality of life that need special attention and receive effective treatment to prevent unpleasant events (Heidari et al., 2020a).

Quality of life as an individual's perception of life as seen from the context of culture, behavior, and value systems, where they live and related to living standards, expectations, pleasures, and individual assessments of their position in

life (Lara & Hidajah, 2017a). Measurement of quality of life includes dimensions of physical health, psychological health, social relationships, and relationships with the environment (Lara & Hidajah, 2017b). Quality of life is a multidimensional phenomenon (Budiono & Rivai, 2021). Elderly who have a good quality of life have characteristics such as being able to carry out activities and fulfill their basic needs independently and have good cognitive function. The decrease in the quality of life for the elderly is due to the emergence of degenerative diseases which can reduce productivity, weak physical condition, and bad relationships with other people (Saputri et al., 2020). In addition, the discrepancy between the condition of the elderly and the hopes and wishes of the elderly can cause the elderly to experience depression (Kiik et al., 2018). The prevalence of adults aged >50 years reporting no physical activity is 27.5% (Palit et al., 2021). The prevalence of depression in the elderly reaches 8-15% and the prevalence in various countries in the world is around 13.5% (Hartutik & Nurrohmah, 2021). Recent research has proven that elderly people who experience depression have a significant reduction in quality of life in general (Shalahuddin et al., 2021). Therefore, problems in the elderly really need to be considered because they

are related to the quality of life of the elderly, so they require comprehensive treatment.

One form of mind-body medicine therapy is laughter therapy (Erfrandau, 2017a). Laughter therapy is a form of communication that evokes laughter, smiles, pleasant feelings, and allows for one's interaction (Making et al., 2022). Meanwhile, according to the American association for therapeutic humor (AATH), laughter therapy refers to activities that improve the health and well-being of patients by using interesting experiences and expressions (Yim, 2016). Laughter therapy has a special position in alternative medicine, because it is universal, an effective drug and without side effects (Heidari et al., 2020b). Giving laughter therapy for medicinal purposes, must be carried out with a predetermined technique. Laughter therapy is philosophical and has a scientific basis and predetermined practical techniques (Chandra et al., 2020). Giving laughter therapy can provide various benefits for the elderly including reducing stress, depression, anxiety and psychosomatic disorders, strengthening the immune system, avoiding high blood pressure and heart disease, reducing bronchitis and asthma, and making you look younger (Safitri et al., 2023).

Laughter therapy can improve blood circulation, gastrointestinal, skeletal muscle, and the body's respiratory system, regulate body hormones, regulate sleep and rest cycles, and improve immune system performance (Heidari et al., 2020b). Therefore, stress hormones such as cortisol need to be anticipated by preparing the body to deal with various kinds of stress that occur (Heidari et al., 2020b). Laughter therapy can relieve disease symptoms, such as fatigue, thus improving quality of life (Heidari et al., 2020b). Laughter therapy can reduce ACTH secretion and cortisol levels in the blood. Decreased ACTH secretion will stimulate an increase in the production of serotonin and endorphins in the brain which results in feelings of comfort, pleasure and relaxation (Erfrandau, 2017b). Giving laughter therapy regularly can improve the social skills of the elderly. In addition, giving laughter therapy can also cause biological changes to improve physical and mental health and self-esteem (Heidari et al., 2020b).

Various studies on the effectiveness of laughter therapy have been carried out, but only a few studies have been conducted to find out the use of laughter therapy in fulfilling the quality of life of the elderly. Based on some of the explanations above, it is necessary to study further about the use

of laughter therapy in fulfilling the quality of life of the elderly. Therefore, there is a need for further studies through literature review studies on The Use of Laughter Therapy in Fulfilling the Quality of Life of Elderly.

2. METHODS

This study is a literature review to examine more about the use of laughter therapy in fulfilling the quality of life of the elderly. The inclusion criteria used by researchers included (1) the type of research design in the articles used, namely Randomized Controlled Trial (RCT), Clinical Trial, Case Study and Quasi-Experimental; (2) Articles written in Indonesian or English; (3) The population in the analyzed paper is the elderly over 60 years of age; (4) Articles published between January 2018-April 2023; (5) Study of measuring the quality of life in the elderly using questionnaires and interviews; (6) The article is the result of research; (7) Explaining laughter therapy for the elderly; (8) Explaining the quality of life in the elderly. The exclusion criteria used by the researchers included (1) study deviations from the topic of interest (laughter therapy and quality of life); (2) Articles are not full-text; (3) Article found published in two or more journals; (4) Articles resulting from proceedings or

conferences; (5) Article withdrawn from journal due to publication ethics.

The search engines used in this research include PubMed, SpringerLink, Science Direct, Google Scholar and Wiley Online Library. The search for keywords from Boolean aims to help search for literature review studies using the formulation of a combination of connecting keywords "AND, OR, NOT" (Aliyu, 2017).

Researchers use appropriate keywords based on search standards from Boolean Operators by searching in English by writing in two languages, namely: 1. Indonesian = ("laughter therapy") AND ("quality of life") AND ("elderly" OR "older adult"); 2. English = ("laughter therapy") AND ("quality of life") AND ("elderly" OR "older adult").

The selection of research articles that will be obtained will use the PRISMA diagram with 4 stages of selection in detail according to the sequence, namely first identification, screening, eligibility and included.

3. RESULTS

The results of the findings of the research articles by the researcher, namely that there were a number of articles published in 2018 to 2023, there were 314,394 articles, then the researchers conducted further screening and obtained

a total of 7 articles. These articles were excluded according to the criteria of the study and 1 article was excluded because it was not specific to the laughter therapy given to the elderly with 1 article, so that the article that will be continued for further study was in accordance with the topic criteria, namely 6 articles. Then, the final screening stage was carried out by re-screening based on the inclusion criteria that had been set by the researcher and obtaining articles that did not fit the

inclusion criteria as much as 1 article with inappropriate criteria related to the target in the article, not only the elderly, but also those aged Adults are in the range of 40-64 years.

The final stage was carried out in accordance with the research criteria and also the eligibility according to the researchers, namely obtaining as many as 5 articles. The results of the review of each of the 5 research articles are explained in Table 1.

Table 1. Articles results (continue to page 206)

TITLE	AUTHORS	YEAR	RESULTS
Beneficial effect of laughter therapy on physiological and psychological function in elders	Yuki Yoshikawa, Etsuko Ohmaki, Hirohisa Kawahata, Yoshihiro Maekawa, Toshio Ogihara, Ryuichi Morishita, Motokuni Aoki	2018	The results of the intervention on physiological function after repeated 4 weeks showed a decrease in systolic blood pressure, decreased heart rate compared to before the intervention, plasma serotonin concentration significantly increased compared to before the intervention, in addition, a significant decrease in salivary CgA concentration, but on NK activity there was no significant difference between before and after the intervention. The results of the intervention after it was carried out on psychological functions after being repeated for 4 weeks showed that the total score was significantly reduced compared to before being given laughter therapy.
Effect of Laugh Therapy on The Stress the Elderly At The Werdha Bina Bhakti Nursing Home In 2020	Royani, Ambiya Aulia, Tirta Yenti	2020	The results of the intervention for 6 times a week show the results of an analysis of 32 respondents found that univariate data showed stress before laughing therapy stated that the majority of stress levels were in the moderate category, namely 17 respondents (53.1%) and in the mild category, namely 14 respondents (43.8%) while stress in the severe category was 1 respondent (3.1%). And after laughing therapy it was stated that the majority of stress was in the mild category, namely as many as 15 respondents (46.9%), in the normal category, as many as 10 respondents (31.3%) and in the moderate category, namely as many as 7 respondents (21.9%). The conclusion is that there is a significant difference in the level of stress experienced by the elderly before and after being given laughter therapy at the Bina Bhakti Serpong Nursing Home.

TITLE	AUTHORS	YEAR	RESULTS
Effect of laughter therapy on depression and quality of life of the elderly living in nursing homes	Mohammed heidari, Mansureh ghodusi borujeni, Parvin Rezaei, Shokouh kabirian abyaneh, Korosh heidari	2020	The results of the intervention that was given to the treatment group showed that before being given laughter therapy, most of the respondents experienced mild depression (40%) but after being given the intervention it showed that the depression score became normal and showed a decrease in depressive symptoms after the intervention. While the results in the control group before the intervention, some respondents showed a depression score (46.6%) and after the intervention the depression score remained normal (44.4%). Conclusion: the control group had no effect before and after the intervention.
Effects of Laughter Therapy on Life Satisfaction and Loneliness in Older Adults Living in Nursing Homes in Turkey: A Parallel Group Randomized Controlled Trial	Nilgün Kuru Alici, Pınar Zorba Bahceli	2021	Before being given the intervention the control and experimental groups were measured using SWLS. The results of the intervention in the experimental group were given laughter therapy 2 times a week for 6 weeks, but the control group was not given intervention. The two groups showed no statistically significant difference in the total score. While there is a statistically significant difference in the total score of De Jong Gierveld Loneliness Scale (DJGLS).
The Effect of Laughter Therapy on Anxiety Levels in the Elderly at the Elderly Social Service UPTD Tresna Werdha Lampung	Yulia Indah Permata Sari	2023	The pre-test anxiety score has a low score of 16 (mild anxiety) and a high score of 60 (severe anxiety), while the post-test anxiety score has a low score of 10 (mild anxiety) and a high score of 45 (moderate anxiety). Based on the results of the Wilcoxon Signed Rank Test before and after laughter therapy, a p value of 0.000 was obtained, where $p < 0.05$, which means that the laugh therapy given has an effect on reducing anxiety levels.

Laughter Therapy Description

Laughter therapy has a general definition, namely a person's efforts to move, express and express the limbs and senses accompanied by feelings of joy and feelings of relaxation. The research articles obtained, namely 5 in number, showed that they used the same laughter therapy (Yoshikawa et al., 2019), (Heidari et al., 2020), (Kuru Alici & Zorba Bahceli, 2021), (Sari, 2023), (Royani et al., 2020). The laughter therapy given is explained into several stages that are carried out related to

the steps that are carried out sequentially.

Laughter therapy is given twice a week for six weeks with stages including (Kuru Alici et al., 2018): the first 10 minutes do warm-up exercises which include stretching soft and clapping hands, after that the second five minutes are deep breathing exercises, and 15 minutes in the third session are laughing exercises (using a milkshake type laugh, lion laugh, laughing mobile phone, laughing hugging, laughing hot soup, laughing birds, talking no make sense, practice speeches, laugh at

a sick limb, laugh greetings, laugh bugi techniques), play (the first participant asks someone's name, followed by the participant next to him and tells his name to the first participant, sings loudly, plays with balloons, then continued with giving hope (participants were directed to hold hands and make a wish and cheer when their wish came true.

Whereas in the study (Heidari et al., 2020) after determining the intervention group and the control group before the pretest they were given a depression scale and collected. The intervention was carried out 10 sessions three times a week with each session lasting one hour with the first 30 minutes of a session of playing music and visual slides or funny video clips, the next 15 minutes holding fun and happy games with prizes, and the next 15 minutes are joke tellers.

Overview The Quality of Life of Elderly

The quality of life possessed by the elderly is indicated by a parameter known as life expectancy, which is especially experienced by the elderly. Indonesia in 2020 will become a country with a portion of the elderly population which has increased to around 26.82 million with elderly characteristics (Pradina et al., 2022). Around 24% of 100 elderly in 2020 experience health problems. The quality of

life of the elderly with a good socio-economic level and also education has an impact on the quality of life of the elderly. This is also inseparable from the work of the elderly with the characteristics of the elderly who are still working and the type of work performed shows a different quality of life for the elderly (Ekawati et al., 2020; Pradina et al., 2022). Measurement of quality of life includes dimensions of physical health, psychological health, social relationships, and relationships with the environment. The decrease in the quality of life for the elderly is due to the emergence of degenerative diseases which can reduce productivity, weak physical condition, and bad relationships with other people (Saputri et al., 2020).

Effect of Laughter Therapy on Fulfilling Quality of Life of Elderly

Laughter therapy is included in complementary or non-pharmacological therapies with no downsides in the form of side effects or negative impacts that can be experienced by someone who carries out the activities of this laughter therapy. The articles selected by the researchers for further study show that there is an impact not only on the psychological factors experienced by the elderly who carry out these laughter therapy activities, namely an increase in mood and also a feeling of

happiness by releasing the hormone serotonin and also endorphins to provide a relaxing effect so as to provide positive impact on reducing depressive and anxiety symptoms that can affect survival in old age.

Articles that have been reviewed (Heidari et al., 2020c; Kuru Alici & Zorba Bahceli, 2021; Royani et al., 2020; Sari, 2023; Yoshikawa et al., 2019) it can also have an impact in the form of improvement of physical health factors as well as social life and the ability to adapt to the surrounding environment both among the elderly and other people at a younger age by showing the ability to express the elderly by feeling happy with others when this laughter therapy takes place.

4. DISCUSSION

Elderly with a quality of life that goes hand in hand with the aging process experienced at the age of 60 years and above affects the level of ability of the elderly both in carrying out activities independently, socializing and the ability to adapt to an environment that is experiencing a deficit (Lutfian et al., 2022). This is shown by the results of a study by (Ekawati et al., 2020; Kuru Alici & Zorba Bahceli, 2021) which found that the quality of life of the elderly is still less prosperous through aspects of mood and also behavior

shown by the elderly who show disinterest in living in the past. old age and also disturbed psychological factors such as depression. The main factor that decreases the quality of life in the elderly is the aging process or aging resulting in a decrease in body immunity and an increased risk of developing psychological disease (Susanto & Widayati, 2018)

The physical health factor which is one of the benchmarks for the quality of life in the elderly is indicated by the elderly who feel dissatisfied with their old age with changes in the body's physiology that have decreased, therefore several things can be applied to the elderly, namely complementary therapy as non-pharmacology that can be applied not only by health workers such as laughter therapy, but also by companions or families of the elderly by seeking optimal teaching in improving the support system skills possessed by the elderly in improving the quality of life of the elderly (Ekawati et al., 2020; Wahyuni & Verawati, 2020).

The quality of life of the elderly is included in WHO which consists of several component aspects which include psychological, physical health, environmental and social domains with the level of problems in these four components which are still high as is the case with psychological aspects, namely depression

and anxiety and pessimism, then on aspects of physical health as indicated by a history of chronic illness with pain complaints that affect the quality of life in the elderly and the inability of the elderly to socialize due to a decrease in the level of ability in independence as well as degenerative factors of decreased memory which causes the elderly to often be silent and confused.

Laughter therapy which can be done with various activities such as singing, imitating laughter according to the rhythm, playing, or also doing things that are considered unreasonable. Laughter therapy is used as a therapy that can improve the psychological health of someone who is experiencing mental health problems, especially depression (Siregar & Gultom, 2019). The elderly has a high tendency in several studies that have been conducted previously with findings that are still high in the incidence of depression and stress experienced.

This cannot be separated from the elderly who are experiencing an aging process, as well as the elderly with degenerative health conditions due to degenerative physical abilities that make them vulnerable to disease or worsening of physical ailments which can indirectly have an impact on psychological aspects, causing the emergence of feelings of

unhappiness in living their old age which has a lasting impact on the psychological health of the elderly. This is also in line with research (Lestari & Widyaningrum, 2021; Natalia Trijayanti Idris et al., 2020) on types of non-pharmacological or complementary therapies that are used to reduce anxiety and depression levels in the elderly by improving the quality of life of the elderly such as experienced sleep pattern disturbances. The main benefits of the psychological impact obtained by the elderly are being happier, improving the mood to be better and feeling calm and increasing the ability to socialize among the elderly.

Laughter therapy given to the elderly affects the health level of the elderly as a form of fulfilling the quality of life needs of the elderly which can be applied together with the elderly and also does not require expensive costs and can be done easily together which has a positive value in increasing the ability of the elderly in several aspects of the quality of life in old age which has decreased due to physiological degenerative in the body.

Laughter therapy is given to the elderly with the impact it has on the psychological aspect with the mechanism of releasing endorphins and also serotonin which can have an impact on psychology, namely cognitive or perceptual, emotional

related to the incidence of depression and anxiety experienced, this is according to (Kuru Alici et al., 2018) by giving laughter therapy it can help in providing an opportunity for the elderly to be able to express the positive feelings they have that were previously veiled due to negative thoughts and feelings that dominate and can increase endorphins which are useful in giving positive perceptions .

The impact on physical health in the elderly is by lowering blood pressure where laughing activities reduce stress hormones, namely levels of cortisol in the body so that it is followed by suppressed sympathetic nerves which can have a relaxing effect on muscles. This is in accordance with what is found in research (Royani et al., 2020) during this laughter therapy activity the facial muscles which have a role in binding blood vessels can facilitate blood pressure which is regulated into the blood flow to the brain, this can happen because when the process of laughing the facial muscles contract and also the activity of opening and closing the mouth provides the ability to suck in enough air and the oxygen flowing into the body increases, this affects the brain in impacting temperature regulation which causes the release of the hormone endorphins, melatonin, and serotonin which has a unidirectional effect on blood vessels as a vasodilator and

increases the smoothness of blood vessels reducing the risk of hypertension. Elderly with chronic diseases can also be given this laughter therapy as a form of consistency in having positive emotions that reduce chronic pain levels fluctuating in giving this laughter therapy as is the case in research (Morishima et al., 2019; Yusnaeni et al., 2019) which explained that the laughter therapy applied has an effect on reducing tension due to chronic pain felt by the elderly for their illness, one of which is cancer, this is indicated by the release of endorphins by the body as a natural analgesic which can reduce pain and tolerate the pain experienced by administering The therapy is carried out, namely one session per week with a duration of 1 hour per session.

Laughter therapy given to the elderly has a significant impact and can be applied to meet the quality of life of the elderly which is not only one aspect but four aspects as a form of fulfillment in old age with assistance not only from health workers such as nurses but also components of other elderly companions both from family closest to the government in the welfare of the elderly.

5. CONCLUSION

The quality of life possessed by the elderly is covered in WHO, which consists

of several component aspects, including psychological, physical health, environmental and social domains, with the level of problems in these four components still high, as is the case in psychological aspects, namely depression and anxiety and pessimism, then in the physical health aspect, which is indicated by a history of chronic disease with complaints of pain which affects the quality of life in the elderly as well as the inability of the elderly to socialize due to a decrease in the level of ability to be independent and degenerative factors such as memory loss.

Laughter therapy given to the elderly has a significant impact and can be applied to fulfill the quality of life of the elderly, including in the psychological aspect, namely providing positive perceptions and also reducing levels of depression and stress in the elderly, then in the physical health aspect it shows an increase in body immunity in various ways. the activities of laughter therapy carried out, and the last one is the quality of life aspect in fulfilling socialization and adapting to the environment which is shown by the elderly after being given this laughter therapy becoming happier by feeling that they are not alone and also interacting socially with fellow elderly in releasing expressions. happy and improve the ability of the elderly

in providing mutual support to one another with the environment and the circumstances they are experiencing.

There is great hope for future researchers to be able to carry out literature review-based analysis using any technique that can focus and specifically discuss each laughter therapy activity provided to the elderly, both from the perspective of health workers and other professions who work together in synergy in supporting the welfare of the elderly in improving the quality of life. in old age for the elderly.

AUTHOR CONTRIBUTIONS

Substantial contributions to conceptualization, data curation, analysis, Supervision Writing - review & editing: Tri Freanti Putri, Tantut Susanto, Fahrudin Kurdi. Manuscript revisions: Tri Freanti Putri and Fahrudin Kurdi.

CONFLICT OF INTEREST

The authors declare no conflict of interest for this publication.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

REFERENCES

- Aliyu, M. B. (2017). Efficiency of Boolean Search strings for Information Retrieval. *American Journal of Engineering Research (AJER)*, 6(11).
- APU Writing Centre. (2015). Literature Review. APU Writing Centre. <https://doi.org/10.1177/106286060201700509>
- Budiono, N. D. P., & Rivai, A. (2021). Faktor-faktor yang mempengaruhi kualitas hidup lansia. *Jurnal Ilmiah Kesehatan Sandi Husada*, 10(2), 371–379. <https://doi.org/10.35816/jiskh.v10i2.621>
- Cahyono, E. A., Sutomo, & Harsono, A. (2019). Literatur Review: Panduan Penulisan dan Penyusunan. *Jurnal Keperawatan*, 12.
- Chandra, A., Sulistyowati, F., Triyono, A., Muhsin, H., Irsasri, Sugiyanto, Susanto, T. A., & Setyowati, Y. (2020). Komunikasi, Media, Dan Pemberdayaan Masyarakat "Di Era Pandemi. APMD Press.
- Ekawati, L., Zahroh, C., Munjidah, A., Afridah, W., Noventi, I., Mukti, P., & Winoto, P. (2020). Quality of Life in The Elderly. *Jurnal Ilmiah Keperawatan Stikes Pemkab Jombang*, 6(2).
- Erfrandau. (2017a). Pengaruh Terapi Tawa terhadap Kualitas Tidur pada Lansia di Unit Pelayanan Teknis Panti Sosial Lanjut Usia (UPT PSLU) Kabupaten Jember (The Effect of Laughter Therapy on Sleep Quality of Elderly in Long-Term Care Jember). *Pustaka Kesehatan*, 5(2), 276–283.
- Erfrandau. (2017b). Pengaruh Terapi Tawa terhadap Kualitas Tidur pada Lansia di Unit Pelayanan Teknis Panti Sosial Lanjut Usia (UPT PSLU) Kabupaten Jember. *Pustaka Kesehatan*, 5(2), 276–283.
- Hartutik, S., & Nurrohmah, A. (2021). Gambaran Tingkat Depresi Pada Lansia Di Masa Pandemic Covid-19. *Jurnal Ilmu Keperawatan Komunitas*, 4(1), 6–18. <https://doi.org/10.32584/jikk.v4i1.911>
- Heidari, M., Borujeni, M. G., Rezaei, P., Abyaneh, S. K., & Heidari, K. (2020a). 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>
- Heidari, M., Borujeni, M. G., Rezaei, P., Abyaneh, S. K., & Heidari, K. (2020b). 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>
- Kementerian Kesehatan RI. (2017). Situasi lansia di Indonesia tahun 2017: Gambar struktur umur penduduk indonesia tahun 2017. Pusat Data Dan Informasi, 1-9.
- Kiik, S. M., Sahar, J., & Permatasari, H. (2018). Peningkatan Kualitas Hidup Lanjut Usia (Lansia) Di Kota Depok Dengan Latihan Keseimbangan. *Jurnal Keperawatan Indonesia*, 21(2), 109-116. <https://doi.org/10.7454/jki.v21i2.584>
- 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 : The Official Journal of the Association of Rehabilitation Nurses*, 46(2), 104-112. <https://doi.org/10.1097/RNJ.0000000000000266>
- Kuru Alici, N., Zorba Bahceli, P., & Emiroğlu, O. N. (2018). The preliminary effects of laughter therapy on loneliness and death anxiety among older adults living in nursing homes: A nonrandomised pilot study. *International Journal of Older People Nursing*, 13(4). <https://doi.org/10.1111/opn.12206>
- Lara, A. G., & Hidajah, A. C. (2017a). Hubungan Pendidikan, Kebiasaan Olahraga, Dan Pola Makan Dengan Kualitas Hidup Lansia Di Puskesmas Wonokromo Surabaya. *Jurnal PROMKES*, 4(1), 59. <https://doi.org/10.20473/jpk.v4.i1.2016.59-69>
- Lara, A. G., & Hidajah, A. C. (2017b). Hubungan Pendidikan, Kebiasaan Olahraga, Dan Pola Makan Dengan Kualitas Hidup Lansia Di Puskesmas Wonokromo Surabaya. *Jurnal PROMKES*, 4(1), 59. <https://doi.org/10.20473/jpk.v4.i1.2016.59-69>

- Lestari, N. D., & Widyaningrum, R. (2021). The effect of laughter therapy to reduce work stress levels among administrative staff at Universitas Muhammadiyah Yogyakarta. *Bali Medical Journal*, 10(3 Special issue ICONURS), 1225–1229. <https://doi.org/10.15562/bmj.v10i3.2856>
- Liberati, A., Altman, D. G., Tetzlaff, J., Mulrow, C., Gøtzsche, P. C., Ioannidis, J. P. A., Clarke, M., Devereaux, P. J., Kleijnen, J., & Moher, D. (2009). The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: Explanation and elaboration. *PLoS Medicine*, 6(7). <https://doi.org/10.1371/journal.pmed.1000100>
- Lutfian, Linggar Ayu Pramela, A., Putriyas Ningsih, A., & Kurdi, F. (2022). Pengaruh Kombinasi Senam Anti Hipertensi Dan Terapi Tawa Terhadap Tekanan Darah Lansia. *Jurnal Medika Karya Ilmiah Kesehatan*, 7(1).
- Making, M. A., Gultom, A. B., Apriza, Setyawan, A., Toru, V., Banase, E. F. T., Mulu, S. T. J., Noviana, I., Radandima, E., Hakim, A. N., Wulandari, I. S., Arsa, P. S. A., Darma, D. D., Rahmawati, N., Landi, M., Agus Setyo Utomo, A. D. F. A., Landudjama, L., Gunawan, Y. E. S., Sabar, S., ... Israfil. (2022). Perawatan Luka Dan Terapi Komplementer (Apriza & A. Setyawan, Eds.). *Media Sains Indonesia*.
- Morishima, T., Miyashiro, I., Inoue, N., Kitasaka, M., Akazawa, T., Higeno, A., Idota, A., Sato, A., Ohira, T., Sakon, M., & Matsuura, N. (2019). Effects of laughter therapy on quality of life in patients with cancer: An open-label, randomized controlled trial. *PLoS ONE*, 14(6). <https://doi.org/10.1371/journal.pone.0219065>
- Natalia Trijayanti Idris, D., Astarani, K., & Mahanani, S. (2020). The Comparison between the Effectiveness of Laughter Therapy and Progressive Muscle Relaxation Therapy towards Insomnia in Elderly Community at St. Yoseph Kediri Nursing Home. *Indian Journal of Public Health Research & Development*, 11(9).

- Nurhidayati, I., Suciana, F., & Septiana, N. A. (2021a). Status gizi berhubungan dengan kualitas hidup lansia di puskesmas jogonalan i 1,2,3. *CENDEKIA UTAMA Jurnal Keperawatan Dan Kesehatan Masyarakat*, 10(2), 180–190.
- Nurhidayati, I., Suciana, F., & Septiana, N. A. (2021b). Status gizi berhubungan dengan kualitas hidup lansia di puskesmas jogonalan i 1,2,3. *Cendekia Utama Jurnal Keperawatan Dan Kesehatan Masyarakat*, 10(2), 180–190.
- Palit, I. D., Kandou, G. D., Kaunang, W. J. P., Kesehatan, F., Universitas, M., & Ratulangi, S. (2021). Hubungan antara Aktivitas Fisik dengan Kualitas Hidup pada Lansia di Desa Salurang Kecamatan Tabukan Selatan Tengah Kabupaten Kepulauan Sangihe. *Jurnal KESMAS*, 10(6), 93–100.
- Polit, D. F., & Beck, C. T. (2014). *Essentials of Nursing Research Seventh Edition Appraising Evidence for Nursing Practice*. In Lippincott Williams & Wilkins.
- Pradina, E. I. V., Marti, E., & Ratnawati, E. (2022). Hubungan antara Dukungan Keluarga dengan Kualitas Hidup pada Lansia di Padukuhan Pranan, Sendangsari, Minggir, Sleman. *Jurnal Keperawatan Klinis Dan Komunitas*, 6(2), 112. <https://doi.org/10.22146/jkkk.75227>
- Rivana, E. J. (2020). Keanekaragaman Senyawa Flavonoid Terprenilasi Dari Tumbuhan Keledang (*Artocarpus Lanceifolius Roxb*) Serta Aktivitas Sitotoksinya Terhadap Sel Murine Leukemia p-288. Universitas Pendidikan Indonesia.
- Royani, Aulia, A., & Yenti, T. (2020). Effect Of Laugh Therapy On The Stress The Elderly At The Werdha Bina Bhakti Nursing Home In 2020. *Jurnal Kesehatan STIKes IMC Bintaro*, 3(1).
- Safitri, D. M., Septiani, W., Azmi, N., Rizani, N. C., & Rahmawati, N. (2023). *Ergonomika*. Nas Media Pustaka.
- Saputri, N. D., Susanto, T., & Susumaningrum, L. A. (2020). Association between cognitive function and quality of life in aged people in an elderly home. *Revista Cubana de Enfermeria*, 36(2), 1–13.
- 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.
<http://journal.universitaspahlawan.ac.id/index.php/ners>
- Shalahuddin, I., Maulana, I., Rosidin, U., & Keperawatan, F. (2021). Intervensi Untuk Peningkatan Kualitas Hidup Lanjut Usia Dari Aspek Psikologis: Literatur Review. *9(2)*, 335–348.
- Siregar, R., & Gultom, R. (2019). Effect of Laughter Therapy on Depression Level in Elderly in a Nursing Home, North Sumatra, Indonesia. *Belitung Nursing Journal*, 5(6), 246–250.
<https://doi.org/10.33546/BNJ.830>
- Sitanggang, Y. F., Sihombing, S. F. R. M., Koerniawan, D., Tahulending, P. S., Febrina, C., & Purba, D. H. (2021). Keperawatan gerontik. 58.
- Stovold, E., Beecher, D., Foxlee, R., & Noel-storr, A. (2014). Study Flow Diagrams in Cochrane Systematic Review Updates : an Adapted PRISMA Flow Diagram. *Systematics Review Journal*, 3(1), 1–5.
- Susanto, T., & Widayati, N. (2018). Quality of life of elderly tobacco farmers in the perspective of agricultural nursing: a qualitative study. *Working with Older People*, 22(3), 166–177.
<https://doi.org/10.1108/WWOP-01-2018-0002>
- Wahyuni, K. S., & Verawati, B. (2020, December). Pengaruh Asuhan Komplementer Terhadap Kesehatan Fisik Pada Lansia. *Seminar Nasional UNRIYO*.
- Yim, J. E. (2016). Therapeutic Benefits of Laughter in Mental Health: A Theoretical Review. *Tohoku Journal of Experimental Medicine*, 239(3), 243–249.
- Yoshikawa, Y., Ohmaki, E., Kawahata, H., Maekawa, Y., Ogihara, T., Morishita, R., & Aoki, M. (2019). Beneficial effect of laughter therapy on physiological and psychological function in elders. *Nursing Open*, 6(1), 93–99.
<https://doi.org/10.1002/nop2.190>
- Yusnaeni, Y., Erika, K. A., & Rachmawaty, R. (2019). Effect of Humor Therapy on Chronic Pain: A Literature Review. *Journal of Nursing Practice*, 2(2), 97–101.
<https://doi.org/10.30994/jnp.v2i2.51>