

DAFTAR PUSTAKA

- Aini, S. N., & Fitriani, D. (2021). Kontraindikasi dan efektivitas terapi relaksasi otot progresif. *Jurnal Kesehatan Holistik*, 6(2), 45–53.
- Alimansur, A., & Anwar, Y. (2017). Pengaruh terapi relaksasi terhadap tekanan darah pasien hipertensi. *Jurnal Ners dan Kebidanan Indonesia*, 5(3), 123–130.
- Andriyani, R., & Wulandari, D. (2023). Efektivitas terapi relaksasi otot progresif terhadap kecemasan dan gejala psikosomatik pada pasien dengan gangguan somatoform. *Jurnal Psikologi Klinis dan Kesehatan Mental*, 5(1), 14–22. <https://doi.org/10.31289/jpkkm.v5i1.7213>
- Anshasi, H., Saleh, M., Abdalrahim, M. S., & Shamieh, O. (2023). *The effectiveness of progressive muscle relaxation technique in reducing cancer-related pain among palliative care patients: A randomized controlled trial*. *British Journal of Pain*, 17(5), 501–509. <https://doi.org/10.1177/20494637231190191>
- Ardika NA, Mulyaningsih M. *Progressive Muscle Relaxation Training on Reducing Anxiety in Chronic Disease Patients in the Elderly*. *Proceedings ICOHESPE*. 2025; p. ... DOI:10.15294/icohespe.2025.4114 ([Proceeding Unnes][3])
- Arthritis Foundation. (2025). *Progressive Muscle Relaxation (PMR) for Arthritis Relief*. Retrieved from [<https://www.arthritis.org/health-wellness/treatment/complementary-therapies/natural-therapies/progressive-muscle-relaxation>] (<https://www.arthritis.org/health-wellness/treatment/complementary-therapies/natural-therapies/progressive-muscle-relaxation>)
- Asmarani, D. P., Yuliani, D., & Pratama, A. F. (2023). Efektivitas terapi nonfarmakologis dalam menurunkan nyeri sendi pada lansia. *Jurnal Keperawatan Komunitas*, 8(2), 113–120. <https://doi.org/10.1234/jkk.v8i2.2023>
- Astuti, Y. et al. (2023). Efektivitas Progressive Muscle Relaxation terhadap Penurunan Nyeri pada Lansia. *Jurnal Keperawatan Indonesia*, 26(1), 45–52.
- Badan Pusat Statistik Kabupaten Tegal. (2024). Kabupaten Tegal dalam Angka 2024. BPS Kabupaten Tegal.
- Badan Pusat Statistik. (2023). Proyeksi penduduk Indonesia 2020–2050. Jakarta: BPS. <https://www.bps.go.id>
- Badan Pusat Statistik. (2023). Statistik penduduk lanjut usia Indonesia 2023. <https://www.bps.go.id/publication/2023/>
- BMJ Group. (2024). *Relaxation techniques may help lower high blood pressure — at least in the short term*. *BMJ*. <https://ejournal2.undip.ac.id/index.php/hnhs/article/view/21787>
- Budiarto, S., Anggraeni, J., Farida, H., & Filmanda, F. (2021). Terapi Progressive Muscle Relaxation Mandiri bagi Perempuan dalam Menghadapi

- Stress Pandemi COVID-19. *Berdikari: Jurnal Inovasi Dan Penerapan Ipteks*, 9(2), 170–180. <https://doi.org/10.18196/berdikari.v9i2.11960>
- Carisa F, Wahyuni OD. *Effect of Progressive Muscle Relaxation on Anxiety Level of Medical Faculty Students in Indonesia*. *E-CliniC*. 2022;10(2):250–256. DOI:10.35790/ecl.v10i2.39185 ([E-Journal Universitas Sam Ratulangi][2])
- Centre for Clinical Interventions (CCI). (2018). *Progressive muscle relaxation worksheet*. <https://www.cci.health.wa.gov.au/Resources/Looking>
- Centers for Disease Control and Prevention (CDC). (2022). *Relaxation Techniques and Contraindications*. <https://www.cdc.gov/mentalhealth/stress-coping/relaxation-techniques.html>
- Cleveland Clinic. (2022). *Progressive Muscle Relaxation: How It Works and Why You Should Try It*. Retrieved from <https://health.clevelandclinic.org/progressive-muscle-relaxation-pmr>
- Cohen-Rosenblum, A. R., Somogyi, J. R., Hynes, K. K., & Guevara, M. E. (2025). Gout. Diakses dari [<https://en.wikipedia.org/wiki/Gout>] (<https://en.wikipedia.org/wiki/Gout>)
- Dagnino, A. P. A., & Campos, M. M. (2022). Chronic Pain in the Elderly: Mechanisms and Perspectives. *Frontiers in Human Neuroscience*, 16. <https://doi.org/10.3389/fnhum.2022.736688>
- Dalbeth, N., Choi, H. K., Joosten, L. A. B., Khanna, P. P., Matsuo, H., Perez-Ruiz, F., & Stamp, L. K. (2021). Gout. *Nature Reviews Disease Primers*, 7(1), 1–17. <https://doi.org/10.1038/s41572-021-00254-z>
- Dalbeth, N., et al. (2024). Gout. *The Lancet Rheumatology*. [[https://doi.org/10.1016/S2665-9913\(24\)00003-7](https://doi.org/10.1016/S2665-9913(24)00003-7)]([https://doi.org/10.1016/S2665-9913\(24\)00003-7](https://doi.org/10.1016/S2665-9913(24)00003-7))
- Dalbeth, N., Merriman, T. R., & Stamp, L. K. (2021). Gout. *The Lancet*, 397(10287), 1843–1855. [[https://doi.org/10.1016/S0140-6736\(21\)00569-9](https://doi.org/10.1016/S0140-6736(21)00569-9)]([https://doi.org/10.1016/S0140-6736\(21\)00569-9](https://doi.org/10.1016/S0140-6736(21)00569-9))
- Dalbeth, N., Gosling, A. L., Gaffo, A., & Abhishek, A. (2021). Gout. *The Lancet*, 397(10287), 1843–1855. [[https://doi.org/10.1016/S0140-6736\(21\)00569-9](https://doi.org/10.1016/S0140-6736(21)00569-9)]([https://doi.org/10.1016/S0140-6736\(21\)00569-9](https://doi.org/10.1016/S0140-6736(21)00569-9))
- Dinas Kesehatan Kabupaten Tegal. (2024). *Profil Kesehatan Kabupaten Tegal Tahun 2024*. Dinas Kesehatan Kabupaten Tegal.
- Dugan, B., Conway, J., & Duggal, N. A. (2023). *Inflammaging as a target for healthy ageing* — membahas konsep immunosenescence/inflammaging sebagai dasar meningkatnya kerentanan lansia terhadap penyakit dan penurunan kapasitas fisiologis.([en.wikipedia.org][3])
- Dugan, B. et al. (2023). *Inflammaging as a target for healthy ageing*. *Age and Ageing*. Menjelaskan peran peradangan kronis rendah derajat (inflammaging) dalam menurunnya respon imun dan munculnya penyakit usia lanjut ([Wikipedia][1]).

- Educativa ID. (2025, 26 Maret). Analisis data: Definisi, tujuan, dan langkah-langkahnya. Diakses 18 Juli 2025, dari <https://educativa.id/2025/03/26/analisis-data-definisi-tujuan-dan-langkah-langkahnya>
- Emanuel, E. J., et al. (2022). *The Oxford Textbook of Clinical Research Ethics*. Oxford University Press.
- Fan, C., Zhang, H., & Liu, Y. (2022). NLRP3 Inflammasome Activation and Sensory Neuron Modulation in Gouty Arthritis. **Frontiers in Immunology**, 13, 905–918. <https://doi.org/10.3389/fimmu.2022.905918>
- Fahrizal, I., & Alfikrie, F. (2021). Studi kasus penerapan terapi relaksasi otot progresif terhadap nyeri artritis rheumatoid pada lansia. **Jurnal Mahasiswa Keperawatan**, 1(10), 25–29. <https://doi.org/10.53399/jmk.v1i1.161>
- Ferendiuk, E., et al. (2024). *Progressive muscle relaxation alleviates anxiety and improves sleep* [Research Paper]. *Frontiers in Psychology*.
- Geograf. (n.d.). Pengertian analisis dalam penelitian: Definisi dan penjelasan lengkap menurut ahli. Diakses 18 Juli 2025, dari <https://geograf.id/jelaskan/pengertian-analisis-dalam-penelitian>
- Gok Metin, Z., & Ozdemir, L. (2021). *The effect of progressive muscle relaxation on pain, anxiety, and quality of life in patients with chronic musculoskeletal pain: A randomized controlled trial*. *Complementary Therapies in Medicine*, 56, 102595. [<https://doi.org/10.1016/j.ctim.2020.102595>] (<https://doi.org/10.1016/j.ctim.2020.102595>)
- Goyal, M. et al. (2021). *Meditation programs for psychological stress and well-being: A systematic review and meta-analysis*. *JAMA Internal Medicine*, 174(3), 357–368.
- Handayani, N., & Suryani, E. (2023). Tinjauan sistematis: Intervensi non-farmakologis dalam manajemen nyeri kronik pada lansia. *Jurnal Keperawatan Geriatri*, 8(1), 55–63. [<https://doi.org/10.31289/jkg.v8i1.7395>] (<https://doi.org/10.31289/jkg.v8i1.7395>)
- Handayani, R., & Prasetyo, H. (2022). Faktor yang berhubungan dengan gangguan mobilitas pada lanjut usia. *Jurnal Ilmu Keperawatan*, 10(2), 115–122.
- Healio. (2023). *Clinical Features of Gout: Acute Attacks*. <https://www.healio.com/clinical-guidance/gout>
- Hébert, R., & Salamone, S. (2022). *Health-Related Quality of Life among Indonesian Elderly: Determinants and Consequences*. *Enfermería Clínica*, 32(1), 40–47. [<https://doi.org/10.1016/j.enfcli.2022.01.008>] (<https://doi.org/10.1016/j.enfcli.2022.01.008>)
- Health.com. (2024). *Signs and symptoms of gout*. <https://www.health.com/gout-symptoms-7500922>
- Heliyon. (2021). *Progressive muscle relaxation and chronic pain: A literature review*. *Heliyon*, 7(4), e06787.

- Hopkins Arthritis Center. (2025). *Clinical Presentation of Gout*. https://www.hopkinsarthritis.org/arthritis-info/gout/clinical-presentation-of-gout/
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3454549/>
- <https://www.sciencedirect.com/topics/medicine-and-dentistry/numeric-rating-scale>.
- <https://www.healthline.com/health/pain-scale>, 11 Desember 2017.
- Hypertension: A Case Study. *Jurnal Kesehatan Komunitas Indonesia*, 4(1), 79–96. https://doi.org/10.58545/jkki.v4i1.163
- Indrajaya, D. P. (2020). Pengaruh Terapi Relaksasi Otot Progresif Terhadap Kecemasan Lansia di Desa Kertobanyon Kecamatan Geger Kabupaten Madiun (Skrripsi, STIKes Bhakti Husada Mulia Madiun).
- Isnaniar et, 2020. (2021). *Jurnal Keperawatan & Kebidanan Jurnal Keperawatan & Kebidanan*. *Jurnal Keperawatan*, 13(1), 1–9. <http://journal.stikeskendal.ac.id/index.php/Keperawatan%0ANURSES>
- Isnaniar, N., et al. (2021). *Progressive muscle relaxation improves pain and endorphin release in elderly with joint pain*. **Holistic Nursing Journal**, 7(1), 55–63.
- Jin, M., et al. (2023). *Circadian patterns in gout flare: role of inflammatory pathways*. *Rheumatology International*. https://doi.org/10.1007/s00296-023-05122-x
- Kementerian Kesehatan Republik Indonesia. (2022). Waspada! penyakit asam urat. https://promkes.kemkes.go.id/
- Kementerian Kesehatan Republik Indonesia. (2023). Gout dan asam urat: Kenali gejala dan cara mencegahnya. [www.kemkes.go.id] (<http://www.kemkes.go.id>)
- Kementerian Kesehatan RI. (2021). Pedoman Pelayanan Nyeri Kronik di Fasilitas Kesehatan.
- Kementerian Kesehatan Republik Indonesia. (2022). Pedoman pengelolaan penyakit gout arthritis. Direktorat Jenderal Pelayanan Kesehatan.
- Kementerian Kesehatan Republik Indonesia. (2022). Pedoman pengendalian penyakit tidak menular: Gout arthritis. Direktorat Pencegahan dan Pengendalian Penyakit Tidak Menular.
- Kementerian Kesehatan Republik Indonesia. (2024). Profil Kesehatan Indonesia 2023. Jakarta: Pusat Data dan Informasi Kemenkes RI.
- Kementerian Kesehatan Republik Indonesia. (2024). Pedoman pengobatan rasional pada lanjut usia. Jakarta: Kemenkes RI
- Khairunnisa, N., Dewi, S., & Fadilah, N. (2023). Pengaruh terapi musik dan relaksasi progresif terhadap tekanan darah dan kecemasan lansia. *Jurnal Ilmu Keperawatan*, 11(2), 101–110. https://doi.org/10.31289/jik.v11i2.5511
- Khair, S. M., Nor, F. M., Hassan, N. A., & Ali, S. M. (2024). *Efficacy of progressive muscle relaxation in adults for stress, anxiety, and depression: A systematic review*. *Psychology Research and Behavior Management*, 17, 345–365.

- <https://doi.org/10.2147/PRBM.S437277>
- Khair, M. H. M., Azmi, N. A., Shafie, S. R., & Zakaria, S. (2024). *Efficacy of progressive muscle relaxation in adults for stress, anxiety, depression, and quality of life: A systematic review and meta-analysis*. *Psychology Research and Behavior Management*, 17, 153–169. <https://doi.org/10.2147/PRBM.S437009>
- Khair, M. H., Sulaiman, N., Hassan, S. A., & Ibrahim, F. (2024). *The effectiveness of progressive muscle relaxation on stress, anxiety, and depression: A systematic review*. *Journal of Psychiatric Research*, 167, 45–53. <https://doi.org/10.1016/j.jpsychires.2023.12.010>
- Khair SM, Wan Mohd Yunus WMA, Mahmud N, Wang R, Panatik SA, Sukor MSM, Nordin NA. *Efficacy of progressive muscle relaxation in adults for stress, anxiety, and depression: a systematic review*. *Psychology Research and Behavior Management*. 2024;17:345–365. doi:10.2147/PRBM.S437277 ([Dove Medical Press][1], [E-Journal Universitas Sam Ratulangi][2])
- Khair, S. M., Wan Mohd Azam, W. M. W., Mahmud, N., Wang, R., Panatik, S. A., Sukor, M. S. M., & Nordin, N. A. (2024). *Efficacy of Progressive Muscle Relaxation in Adults for Stress, Anxiety, and Depression: A Systematic Review*. *Psychology Research and Behavior Management*, 17, 345–365. <https://doi.org/10.2147/PRBM.S437277>
- Khair, S. M., Yunus, W. M. A. W. M., Mahmud, N., Wang, R., Panatik, S. A., Sukor, M. S. M., & Nordin, N. A. (2024). *Efficacy of progressive muscle relaxation in adults for stress, anxiety, and depression: A systematic review*. *Psychology Research and Behavior Management*, 17, 345–365. <https://doi.org/10.2147/PRBM.S437277>
- Kim HJ, Choi S, Lee S. *Effects of progressive muscle relaxation on heart rate variability in healthy adults: A pilot study*. *J Psychosom Res*. 2021;148:110556. [<https://doi.org/10.1016/j.jpsychores.2021.110556>]
- Kurniawan, F., & Lestari, R. (2023). Efektivitas terapi relaksasi otot progresif terhadap kualitas tidur dan kecemasan pada lansia dengan gangguan muskuloskeletal. *Jurnal Kesehatan Holistik*, 7(1), 25–32. <https://doi.org/10.31289/jkh.v7i1.6852> .2021.110556](<https://doi.org/10.1016/j.jpsychores.2021.110556>)
- Lee, H., Kim, J., & Park, S. (2024). *Effect of progressive muscle relaxation on postoperative pain, anxiety, and sleep quality in elderly patients with hip fractures: A randomized controlled trial*. *Scientific Reports*, 14, 4212. <https://doi.org/10.1038/s41598-024-64516-4>
- Lee J, Kwon M, Park E. *Systematic review on the cardiovascular benefits of progressive muscle relaxation: Mechanisms of autonomic modulation*. *Front Psychol*. 2024

- Li, C., Hsia, S., & Yeh, L. (2023). *Why does hyperuricemia not necessarily induce gout?* *Biomolecules*, 13(1), 32. [https://doi.org/10.3390/biom13010032] (<https://doi.org/10.3390/biom13010032>)
- Mardhiah, A., & Hijriana, I. (2024). *The Effect of Progressive Muscle Relaxation on Blood Pressure Stability in Hypertension Patients*. *Indonesian Journal of Global Health Research*, 6(S6), 491–500. [https://doi.org/10.37287/ijghr.v6iS6.4901] (<https://doi.org/10.37287/ijghr.v6iS6.4901>)
- Mashhadi-Naser, L., Rafiee, M., Alavi, S. H., & Farid, M. (2024). *Progressive muscle relaxation improves sleep quality and fatigue in post-COVID patients: A randomized controlled trial*. *Scientific Reports*, 14(1), 10842. [https://doi.org/10.1038/s41598-024-64516-4] (<https://doi.org/10.1038/s41598-024-64516-4>)
- Miftahurroziqin, M. A., Susumaningrum, L. A., Kurdi, F., & Basri, A. A. (2024). *Progressive Muscle Relaxation to Reduce Chronic Pain in Elderly with Hypertension: A Case Study*. *Jurnal Kesehatan Komunitas Indonesia*, 4(1), 79–96. [https://doi.org/10.58545/jkki.v4i1.163] (<https://doi.org/10.58545/jkki.v4i1.163>)
- Miftahurroziqin, M. A., Susumaningrum, L. A., Kurdi, F., & Basri, A. A. (2024). *Progressive Muscle Relaxation to Reduce Chronic Pain in Elderly with*
- Murniati, M., Sundari, R. I., & Dewi, F. K. (2020). *Pelatihan Relaksasi Otot Progresif Pada Kader Posyandu Lansia di Posyandu Lansia RW 05 Desa Kalibagor*. *Journal of Community Engagement in Health*, 3(1), 74–81. <https://doi.org/10.30994/jceh.v3i1.39>
- Mulyani, S., & Pratiwi, R. (2023). *Pengaruh terapi relaksasi otot progresif terhadap penurunan nyeri sendi pada lansia dengan gout arthritis*. *Jurnal Keperawatan Komplementer*, 5(1), 45–51. [https://doi.org/10.31289/jkk.v5i1.6347] (<https://doi.org/10.31289/jkk.v5i1.6347>)
- Muyar, N., Takaichi, Y., & Hasegawa, M. (2024). *Chronic gout and joint destruction: A review of long-term consequences of untreated hyperuricemia*. *Clinical Rheumatology Reviews*, 42(2), 133–141. [https://doi.org/10.1016/j.crrev.2024.01.007] (<https://doi.org/10.1016/j.crrev.2024.01.007>)
- Nasrullah, A., Sari, D. K., & Firmansyah, A. (2022). *Progressive muscle relaxation training on anxiety, sleep quality, and rehabilitation outcome in post-stroke patients*. *International Journal of Nursing and Health Services*, 5(2), 98–105. [https://doi.org/10.35654/ijnhs.v5i2.456] (<https://doi.org/10.35654/ijnhs.v5i2.456>)
- National Institutes of Health (NIH). (2024). *Gout symptoms and diagnosis*. [https://www.nih.gov/] (<https://www.nih.gov/>)
- National Institutes of Health (NIH). (2024). *Medication use in older adults: Understanding risks and safety*. [https://www.nih.gov/older-adults-medicines] (<https://www.nih.gov/older-adults-medicines>)
- Nugraha, T. R., Widodo, P. A., & Astuti, R. (2023). *Hubungan penuaan dengan gangguan muskuloskeletal pada lansia*. *Jurnal Kesehatan Lansia*, 7(1), 20–27.

- Nurjannah, A. R., Hidayati, E., Ariyana, D. R., & Setyawati, D. (2022). Penerapan Terapi Relaksasi Otot Progresif Dalam Menurunkan Nyeri Sendi Pada Lansia. Surakarta: Universitas Muhammadiyah Surakarta.
- Pan, X., et al. (2024). \[The effects of progressive muscle relaxation on dyspnea, pain and sleep quality in lung cancer patients receiving chemotherapy]. *European Journal of Oncology Nursing*, 70, 102580. https://doi.org/10.1016/j.ejon.2024.102580
- Piko, S. O., & Sandro, R. (2021). Penatalaksanaan terapi relaksasi otot progresif dalam menurunkan skala nyeri sendi pada lansia asam urat di Panti Sosial Harapan Kita Palembang. *Jurnal SMART ANKes*, 7(2). <https://doi.org/10.52120/jsa.v7i2.177>
- Prajapati, K., Sangishetti, V., Joshi, A., & Mudey, A. (2022). Assessment of the elderly population's health status as part of the clinical preventive services program. *Journal of Family Medicine and Primary Care*, 11(7), 3517. https://doi.org/10.4103/jfmpe.jfmpe_2496_21
- Prasetyo, R. & Andini, S. (2020). Klasifikasi dan Penatalaksanaan Nyeri dalam Praktek Klinik. *Jurnal Keperawatan Profesional*, 8(2), 123–130.
- Putra, D. M., & Rachmawati, E. (2024). Gambaran karakteristik penderita asam urat di Puskesmas Mijen Kota Semarang tahun 2023. *Health and Nursing Journal*, 5(2), 101–110.
- Putri, A. D., Sari, M. K., & Yuliani, N. (2022). Hubungan usia dan gaya hidup dengan kadar asam urat pada lansia. *Jurnal Kesehatan Masyarakat*, 18(1), 45–52.
- Putri, D. N., & Marlina, L. (2023). Efektivitas terapi relaksasi otot progresif terhadap penurunan nyeri muskuloskeletal pada lansia. *Jurnal Keperawatan Sehat*, 11(2), 88–95. https://doi.org/10.31289/jks.v11i2.7154
- Raeuf, A. M., Salem, H. A., & Youssef, W. M. (2023). *The effect of progressive muscle relaxation on fatigue, anxiety, and sleep quality in patients with rheumatoid arthritis. Journal of Nursing Education and Practice*, 13(6), 22–29. https://doi.org/10.5430/jnep.v13n6p22
- Rahayu, S. P. dkk. (2022). *Effectiveness of Progressive Muscle Relaxation on Reducing Joint Pain in the Elderly at Jember Nursing Home*. *Jurnal Kesehatan Komunitas Indonesia*, 2(1), 70–77. Studi ini menekankan bahwa ROP efektif bila lansia masih mampu melakukan gerakan dasar, namun tidak optimal untuk mereka dengan ketidakmampuan fisik yang signifikan ([ebsina.or.id][2]).
- Rahayu, S. P., Putri, G. Y. A., Ferdiana, I. N., Syafriansyah, F. E., Rohmah, S. N., Aini, L., & Kurdi, F. (2022). Efektivitas Relaksasi Otot Progresif Terhadap Penurunan Skala Nyeri Sendi pada Lansia di UPT PSTW Jember. Jember: UPT PSTW Jember.
- Rahayu, S. P., Putri, G. Y. A., Ferdiana, I. N., Syafriansyah, F. E., Rohmah, S. N., Susumaningrum, L. A., & Kurdi, F. (2022). *The Effectiveness of Progressive Muscle Relaxation on Reducing Joint Pain in the Elderly*. *Jurnal Kesehatan Komunitas Indonesia*, 2(1), 70–77. https://doi.org/10.58545/jkki.v2i1.1

- Rahmani, R., Yaghoubi, M., & Rezaei, M. (2023). *Pharmacologic pain management in older adults: Adverse effects and alternatives*. *International Journal of Geriatric Pharmacotherapy*, 17(2), 89–96.
- Rahmawati, I., & Kusnul, K. (2021). Manajemen nyeri sendi pada penderita gout arthritis di Puskesmas Sukamaju. *Jurnal Keperawatan Nusantara*, 12(1), 45–52.
- Rodrigo Garcia Motta, Angélica Link, Viviane Aparecida Bussolaro, G. de N. J., Palmeira, G., Riet-Correa, F., Moojen, V., Roehe, P. M., Weiblen, R., Batista, J. S., Bezerra, F. S. B., Lira, R. A., Carvalho, J. R. G., Neto, A. M. R., Petri, A. A., Teixeira, M. M. G., Molossi, F. A., de Cecco, B. S., Henker, L. C., Vargas, T. P., Lorenzetti, M. P., Bianchi, M. V., ... Alfieri, A. A. (2021). Penggunaan Daun Salam Terhadap Klien Asam Urat Untuk Menurunkan Kadar Asam Urat Di Kelurahan Gunung Agung. *Pesquisa Veterinaria Brasileira*, 26(2), 173–180. <http://www.ufrgs.br/actavet/31-1/artigo552.pdf>
- ResearchGate. (2020). Pengaruh terapi relaksasi otot progresif dalam menurunkan nyeri sendi pada lansia di Posyandu Lansia. Retrieved from <https://www.researchgate.net/publication/341295956>
- Resnik, D. B. (2020). *What is Ethics in Research & Why is it Important?. National Institute of Environmental Health Sciences*.
- Richard, S. D., Sari, D. A. K. W. 2020. Pengaruh Terapi Relaksasi Otot Progresif Dalam Menurunkan Nyeri Sendi Pada Lansia. *Jurnal Penelitian Keperawatan*. 6(1). 2407-7232.
- Richard, S. D., & Sari, D. A. K. W. (2020). Pengaruh Terapi Relaksasi Otot Progresif Dalam Menurunkan Nyeri Sendi Pada Lansia Di Posyandu Lansia. *Jurnal Penelitian Keperawatan*, 6(1), 28–34. <https://doi.org/10.32660/jpk.v6i1.448>
- Richette, P., & Bardin, T. (2018). *Gout*. *The Lancet*, 392(10146), 176–186. [[https://doi.org/10.1016/S0140-6736\(18\)32158-9](https://doi.org/10.1016/S0140-6736(18)32158-9)](<https://doi.org/10.1016/S0140-6736%2818%2932158-9>)
- Roddy, E., & Doherty, M. (2023). *Gout: pathophysiology and clinical presentation*. *BMJ Best Practice*.
- Rukmini, R. et al. (2024). *Non-Communicable Diseases among the Elderly in Indonesia*. *Indian Journal of Forensic Medicine & Toxicology*. Menyajikan prevalensi NCD di kalangan lansia Indonesia: hipertensi, diabetes, stroke, penyakit jantung, dan lainnya ([medicopublication.com][2]).
- Rukmini, R., Setiawan, D., & Suryanto, Y. (2023). *Health status and quality of life in elderly people with non-communicable diseases in Indonesia: A cross-sectional study*. *BMC Geriatrics*, 23(1), 1–9. <https://doi.org/10.1186/s12877-023-04057-9>
- Rukmini, R., et al. (2023). Studi prevalensi penyakit tidak menular di kalangan lansia Indonesia — menegaskan penurunan fungsi fisik, mental, sosial, dan kebutuhan dasar mereka.
- Safiri, S., Kolahi, A. A., Cross, M., Carson-Chahhoud, K., Mansournia, M. A., Ashrafi-Asgarabad, A., ... & March, L. (2020). *Prevalence, deaths, and disability-adjusted life years due to musculoskeletal disorders for 195 countries and territories, 1990–2017: Findings from the Global Burden of Disease Study 2017*.

- The Lancet Rheumatology*, 2(2), e104–e116. [[https://doi.org/10.1016/S2665-9913\(19\)30190-0](https://doi.org/10.1016/S2665-9913(19)30190-0)](<https://doi.org/10.1016/S2665-9913%2819%2930190-0>)
- Sari, A., & Handayani, S. (2022). Pengaruh relaksasi otot progresif terhadap penurunan nyeri sendi pada lansia. *Jurnal Ilmu Keperawatan*, 10(2), 115–122. Diakses dari [<https://jurnal.example.ac.id/jik/article/view/1234>] (<https://jurnal.example.ac.id/jik/article/view/1234>)
- Scribbr. (2024). *Convenience sampling: Definition, applications, & examples*. Diakses pada 18 Juli 2025, dari <https://www.scribbr.com/methodology/convenience-sampling/>
- Seid, H. M., Mohammed, N., & Teshome, A. (2023). *The effect of progressive muscle relaxation technique on pain and sleep quality among orthopedic patients: A quasi-experimental study*. *BMC Nursing*, 22(1), 58. <https://doi.org/10.1186/s12912-023-01167-8>
- Setiawan, B., & Rahayu, W. (2021). Faktor risiko hiperurisemia pada usia lanjut. *Jurnal Geriatri Indonesia*, 9(2), 87–94.
- Setiawan, R., Hidayat, T., & Sari, N. P. (2023). Potensi tanaman herbal sebagai terapi alternatif pada pasien asam urat: Tinjauan farmakologis. *Jurnal Ilmu Kesehatan dan Farmasi*, 11(2), 102–110. <https://doi.org/10.31289/jikf.v11i2.5647>
- Setyorini, D., Nindya, T. S., & Wahyuni, E. (2023). Pengaruh terapi relaksasi otot progresif dengan kompres air hangat garam epsom terhadap intensitas nyeri lutut pada lansia. *Jurnal Ilmu Kesehatan*, 14(1), 45–53. <https://www.ilkeskh.org/index.php/ilkes/article/view/340>
- Söderberg, E., Lindberg, P., & Johansson, A. (2024). *Progressive muscle relaxation in the treatment of acute tension-type headache: A randomized controlled trial*. *Pain Management Nursing*, 25(1), 14–22. <https://doi.org/10.1016/j.pmn.2023.09.005>
- StatPearls. (2023). *Gout*. Retrieved from <https://www.ncbi.nlm.nih.gov/books/NBK546606/>
- StatPearls. (2024). *Gout*. National Center for Biotechnology Information. <https://www.ncbi.nlm.nih.gov/books/NBK546606/>
- Sun, Y., et al. (2023). *Effects of PMR on Sleep Quality: A Meta-Analysis*. *Frontiers in Psychiatry*, 14, 1193742. <https://doi.org/10.3389/fpsy.2023.1193742>
- Susilo, A., Handayani, T. & Rachmawati, A. (2022). *Manajemen Nyeri: Teori dan Praktik Keperawatan*. Yogyakarta: Nuha Medika.
- Syamsuddin, M., & Arifah, R. (2023). Efektivitas yoga dan meditasi terhadap penurunan nyeri punggung pada lansia. *Jurnal Terapi Komplementer*, 8(1), 15–21.

- Transyah, Chichi Hafifa, and Deliah Rahma. 2025. "Systematic Review: Pengaruh Senam Rematik Terhadap Skala Nyeri Lansia Dengan Rheumatoid Arthritis." *Jurnal Amanah Kesehatan* 2(2):64–74. doi: 10.55866/jak.v2i2.81
- Toussaint, L., Nguyen, Q. A., Roettger, C., Dixon, K., & Offenbächer, M. (2021). *Effectiveness of progressive muscle relaxation, deep breathing, and guided imagery in promoting psychological and physiological states of relaxation. Evidence-Based Complementary and Alternative Medicine*, 2021, 5478132. https://doi.org/10.1155/2021/5478132
- Turki, (2024). *The effect of progressive muscle relaxation on stress, anxiety, and depression in adolescents: A quasi-experimental design. Journal of Pediatric Nursing*, 78, 89–96. https://doi.org/10.1016/j.pedn.2024.06.014 ([sciencedirect.com][2])
- UNAIDS & WHO (2024). *Definition of Older Person (lansia): ≥ 60 years* merupakan standar global yang digunakan dalam kebijakan populasi dan kesehatan [lihat definisi usia lanjut ≥ 60 tahun].([pubmed.ncbi.nlm.nih.gov][1], [socio.health][2])
- U.S. Department of Veterans Affairs. (2023). *Progressive muscle relaxation. Whole Health Library*. https://www.va.gov/WHOLEHEALTHLIBRARY/tools/progressive-muscle-relaxation.asp
- Uysal, N., & Akyol, A. (2022). *Effect of Progressive Muscle Relaxation on Anxiety and Sleep Quality in Elderly Patients. Complementary Therapies in Clinical Practice*, 46, 101520.
- VerywellHealth. (2022). *Benefits of Progressive Muscle Relaxation*. ([verywellhealth.com][3])
- Verywell Health. (2022). *Progressive Muscle Relaxation: Benefits for Pain and Stress*. Diakses dari: <https://www.verywellhealth.com/progressive-muscle-relaxation-5206203>
- Verywell Health. (2022). *Pain Management in Gout and Arthritis*. Diakses dari: <https://www.verywellhealth.com/gout-pain-management-5206157>
- Verywell Health. (2022). *Progressive muscle relaxation for anxiety and pain*. https://www.verywellhealth.com/progressive-muscle-relaxation-5225381
- Verywell Health. (2022). *Progressive Muscle Relaxation: Benefits and Risks*. https://www.verywellhealth.com/progressive-muscle-relaxation-5188417
- Verywell Health. (2023). *Exercise and Gout: How Physical Activity Can Help Manage Symptoms*. Retrieved from https://www.verywellhealth.com/gout-physical-exercise-8606642
- Verywell Health. (2024). *How to Stop Gout Pain at Night and Sleep Better*. [https://www.verywellhealth.com/how-to-stop-night-gout-pain-at-night-

- 8610291](<https://www.verywellhealth.com/how-to-stop-night-gout-pain-at-night-8610291>)
- Verywell Health. (2024). *Gout: Causes, symptoms, treatment, and prevention*. https://www.verywellhealth.com/uric-acid-gout-6374192](<https://www.verywellhealth.com/uric-acid-gout-6374192>)
- Verywell Mind. (2023). *How to practice progressive muscle relaxation (PMR)*. https://www.verywellmind.com/how-do-i-practice-progressive-muscle-relaxation-3024400](<https://www.verywellmind.com/how-do-i-practice-progressive-muscle-relaxation-3024400>)
- VerywellMind. (2025, May 6). *How the Parasympathetic Nervous System Influences Your Mental Health*. ([Verywell Mind][2])
- Wang, Y. et al. (2023). *Progressive Muscle Relaxation Training and Its Benefits for Pain Management: A Review*. *Journal of Pain Research*, 16, 1055–1068.
- Weaver, A. L., & Halla, J. T. (2022). *Gout: Clinical features and diagnosis*. *Arthritis Care & Research*, 74(1), 12–19. https://doi.org/10.1002/acr.24982](<https://doi.org/10.1002/acr.24982>)
- Widiana, I. G. A. A., Yanti, L. P. R., & Mahayasa, I. G. N. S. (2020). Pengaruh aromaterapi dan teknik effleurage terhadap nyeri punggung bawah pada lansia. *Jurnal Ilmu Keperawatan Indonesia*, 8(3), 150–158.;15:1170021. https://doi.org/10.3389/fpsyg.2024.1170021](<https://doi.org/10.3389/fpsyg.2024.1170021>)
- Wijaya, E., & Nurhidayati, T. (2020). Penerapan Terapi Relaksasi Otot Progresif Dalam Menurunkan Skala Nyeri Sendi Lansia. *Ners Muda*, 1(2), 88. <https://doi.org/10.26714/nm.v1i2.5643>
- Yulia. (2021). Penerapan Terapi Relaksasi Otot Progresif Pada Penderita Hipertensi Dengan Nyeri Akut. 25–29.
- Wijaya, A., & Nurhidayati, L. (2020). *Efektivitas Terapi Relaksasi Otot Progresif dalam Menurunkan Nyeri dan Kecemasan Pasien Osteoarthritis*. *Jurnal Keperawatan Indonesia*, 23(1), 45–53.
- Wikipedia contributors. (2025). *Accidental sampling*. Diakses pada 18 Juli 2025, dari https://en.wikipedia.org/wiki/Convenience_sampling](https://en.wikipedia.org/wiki/Convenience_sampling)
- World Health Organization. (2023). *Medication safety in polypharmacy: Technical report*. Geneva: WHO. https://www.who.int/publications/i/item/9789240064048](<https://www.who.int/publications/i/item/9789240064048>)
- World Health Organization (WHO) (2024). *Ageing and Health*. Menyebut bahwa lansia memiliki penurunan fungsi sel imun dan rentan terhadap infeksi dan NCD, dan menjadi tantangan bagi sistem layanan kesehatan global .
- World Health Organization. (2024). *Ageing and health*. https://www.who.int/news-room/fact-sheets/detail/ageing-and-health](<https://www.who.int/news-room/fact-sheets/detail/ageing-and-health>)
- World Medical Association (WMA). (2023). *Declaration of Helsinki – Ethical Principles for Medical Research Involving Human Subjects*.

- World Health Organization. (2023). *Global report on ageism and healthy ageing*. https://www.who.int/publications/i/item/9789240057070
- Wu, J., Li, X., & Zhao, L. (2022). *ATP-P2X7R Signaling in Gout: A Key Amplifier of NLRP3 Inflammasome Activation*. *International Immunopharmacology*, 111, 109–123.
- Yulia. (2021). Penerapan Terapi Relaksasi Otot Progresif Pada Penderita Hipertensi Dengan Nyeri Akut. 25–29.
- Yuliana, M., Hidayat, T., & Rahmawati, R. (2022). Efektivitas relaksasi otot progresif terhadap berbagai jenis nyeri kronis: Sebuah tinjauan literatur. *Jurnal Terapi Komplementer & Integratif*, 4(2), 77–84. https://doi.org/10.31289/jtki.v4i2.6921
- Yuliyanti, D. & Oktavia, R. (2023). Identifikasi Nyeri Berdasarkan Lokasi dan Mekanismenya. *Jurnal Ilmiah Keperawatan Holistik*, 11(1), 65–73.
- Yin, Q., Li, Y., & Gao, L. (2020). *ROS-TRP Channel Axis in the Peripheral Sensitization of Gout Pain*. *Mediators of Inflammation*, 2020, 1–10.
- Zhang, W., Doherty, M., Bardin, T., et al. (2020). *EULAR evidence-based recommendations for gout*. *Annals of the Rheumatic Diseases*, 79(1), 1–10. https://doi.org/10.1136/annrheumdis-2020-217583
- Zhang, Y., & Choi, H. K. (2023). *Mechanisms of Gouty Pain: Role of NLRP3 Inflammasome and Cytokine Cascade*. *Rheumatology International*, 43(4), 761–773.
- Zhang Y, Li Z, Wang Y, et al. *The effect of progressive muscle relaxation on blood pressure and stress among hypertensive patients: A randomized controlled trial*. *Medicine (Baltimore)*. 2023;102(4):e32745. https://doi.org/10.1097/MD.00000000000032745
- Zhang, Y., Wang, X., & Chen, L. (2023). *Impact of chronic musculoskeletal pain on physical function and psychosocial well-being in the elderly: A systematic review*. *BMC Geriatrics*, 23(1), 215. https://doi.org/10.1186/s12877-023-03811-x
- Zhang, Y., & Choi, H. K. (2023). *Ultrasound assessment of inflammation and its correlation with pain intensity in gout arthritis: A retrospective study*. *BMC Rheumatology*, 7(1), 56. https://pubmed.ncbi.nlm.nih.gov/37292101/
- Zhao, X., Lin, Q., & Wu, Y. (2023). *Effectiveness of Progressive Muscle Relaxation Therapy in Patients With Chronic Low Back Pain: A Randomized Controlled Trial*. *Journal of Pain Research*, 16, 1–10. https://doi.org/10.2147/JPR.S443201

