

DAFTAR PUSTAKA

- Agustina, R., & Hidayat, R. (2020). Pengaruh range of motion (ROM) aktif terhadap fleksibilitas sendi lutut pada lanjut usia. *Jurnal Fisioterapi Indonesia*, 8(2),45–52.
<https://download.garuda.kemdikbud.go.id/article.php?article=2098137>
- Anggreni, D. (2022). *Buku Ajar Metodologi Penelitian Kesehatan* (E. D. Kartiningrum (ed.)). STIKes Majapahit Mojokerto.
- Aulia, A., Agung, W., Nur, S., Panghiyangan, R., Studi, P., Dokter, P., Kedokteran, F., Mangkurat, U. L., Biomedik, D., Kedokteran, F., & Mangkurat, U. L. (2021). *Literature Review : Perbandingan Kekuatan Otot Pasien Dm Tipe 2 Dan Non-Dm. Vol. 4 No.*, 495–504.
- Aulia, A., Cahyawati, W. A. S. ., & Panghiyangan, R. (2021). Literature Review : Perbandingan Kekuatan Otot Pasien Dm Tipe 2 Dan Non-Dm. *Homeostasis*, 4(2), 495–503.
- BPS. (2022). *Lansia yang Berdaya, Lansia yang Merdeka*.
<https://jambi.bps.go.id/id/news/2022/08/25/275/lansia-yang-berdaya--lansia-yang-merdeka.html>
- Cahyaningrum, E. D. (2021). Gambaran Kekuatan Otot Pada Lansia Di Rojinhome Yoichi Kokuba Yonabaru Okinawa Jepang. *Jurnal Ilmiah Kesehatan Keperawatan*, 17(1), 77. <https://doi.org/10.26753/jikk.v17i1.528>
- Detiana, D., Somad, A., & Lusiana, L. (2023). Latihan Range of Motion (ROM) Aktif Meningkatkan Kekuatan Otot Ekstremitas Bawah dan Rentang Gerak Sendi Lansia. *Journal of Telenursing (JOTING)*, 5(2), 3834–3843.
- Dewi, N. L. L. S. (2023). *Gambaran Kekuatan Otot Ekstermitas Bawah Pada Lansia Di Bajar Mungsengan Desa Catur Wilayah Kerja Puskesmas KIntamani III Kabupaten Bangli Tahun 2023 (Doctoral dissertation, Poltekkes Kemenkes Denpasar Jurusan Keperawatan 2023)*. [Poltekkes Kemenkes Denpasar]. <https://repository.poltekkes-denpasar.ac.id/10494/>
- Dias, Vanessa, da, N., Jacome, Maria, Clara, A., Meneses, Wesley, Ribeiro, C., Carlos, Adriana, G., & Gazzola, Juliana, M. (2021). Equilíbrio postural em idosos com e sem Diabetes Mellitus tipo 2: Uma análise comparativa. *Research, Society and Development*, 10(3). <https://doi.org/10.33448/RSD-V10I3.13345>
- Eka Pratiwi Syahrim, W., Ulfah Azhar, M., & Risnah, R. (2019). Efektifitas Latihan ROM Terhadap Peningkatan Kekuatan Otot Pada Pasien Stroke: Study Systematic Review. *Media Publikasi Promosi Kesehatan Indonesia (MPPKI)*, 2(3), 186–191. <https://doi.org/10.56338/mppki.v2i3.805>
- Esbjörnsson, A. C., & Naili, J. E. (2020). Functional movement compensations persist in individuals with hip osteoarthritis performing the five times sit-to-

- stand test 1 year after total hip arthroplasty. *Journal of Orthopaedic Surgery and Research*, 15(1), 1–8. <https://doi.org/10.1186/s13018-020-01663-0>
- Gauchard, G. C., Jeandel, C., & Perrin, P. P. (2019). Aging and postural control: A comparative study of the changes in balance abilities in elderly people. *Neuroscience Letters*, 487(9), 91–95. <https://doi.org/https://doi.org/10.1016/j.neulet.2019.08.022>
- Gul, R., Nazir, I., Amirzada, Muhammad, I., Jahan, F., Naseer, F., & Baig, Tahir, A. (2024). *ing and Synovial Joint Function: Changes in Structure and Implications for Mobility*. <https://doi.org/10.5772/intechopen.1003866>
- Hajebrahimi, F., Tarakçı, D., Özbek, H., Miray, B., & Zeliha, Candan, A. (2024). Effect of hypertension on muscle strength, balance, and mobility in older adults. *Ournal of Exercise Therapy and Rehabilitation*, 11(1), 47–55. <https://doi.org/10.15437/jetr.1092224>
- Hasana, U., Novita, R., Ayuni, M., Keperawatan, D., Kesehatan Payung Negeri Pekanbaru, I., & Kesehatan, I. (2024). *Pengaruh Latihan Range of Motion (Rom) Aktif Terhadap Peningkatan Kekuatan Otot Ekstremitas Bawah Pada Lansia*. 3(8), 3943–3951.
- Hatfield, G. L., Morrison, A., Wenman, M., Hammond, C. A., & Hunt, M. A. (2016). Clinical Tests of Standing Balance in the Knee Osteoarthritis Population: Systematic Review and Meta-analysis. *Physical Therapy*, 96(3), 324–337. <https://doi.org/https://doi.org/10.2522/ptj.20150025>
- Hikmawati, F. (2020). *Metodologi Penelitian*.
- ika gulanda, imam haryoko, & juliastuti. (2023). Edukasi Aktivitas Fisik Terhadap Pencegahan Dementia Pada Lansia Dengan Metode Telephysio. *Jurnal Paradharma* 7(1): 29-34 *Issn: 2549-7405*, 7(1)(2549–7405), 29–34.
- Jonathan Lee, MD and Dylan Peterson, PT, D. (2019). *Joint: Definition and What It Is*. Hinge Health Glossary.
- Jonathan Lee, MD and Dylan Peterson, PT, D. (2021). *Range of Motion (ROM): Definition and What it is*. Hinge Health Glossary.
- Jung, H., Tanaka, S., Iwamoto, Y., Kawano, T., Yamasaki, M., & Tanaka, R. (2021). Reductions in Muscle Strength and Range of Motion Cause Locomotion Disability via Locomotion-Related Functional Limitation in Japanese Older Adults: A Cross-Sectional Study. *Journal of Aging Research*. <https://doi.org/https://doi.org/10.1155/2021/6627767>
- Karanfil, Y., Eşme, M., & Korkusuz, F. (2023). Musculoskeletal physiological changes in aging. *Academic Press*, 83–108. <https://doi.org/https://doi.org/10.1016/B978-0-323-98804-9.00020-7>
- Kerebih, H., M, Prasad, Nigussie, H., Gebremickael, A., & Getachew, T. (2022). Evaluation of Limited Joint Mobility of the Hand and Associated Factors

among Diabetic and Non Diabetic Patients in a Tertiary Care Hospital in Southern Ethiopia: A Case-control Study. *Nternational Journal of Anatomy Radiology and Surgery*. <https://doi.org/0.7860/ijars/2022/49096.2738>

- Koichi, N., Hideki, K., Chiaki, M., Kyosuke, G., Junichiro, Y., Yuichiro, H., Junya, S., Tomoki, O., & Minoru, O. (2022). Relationship Between Muscle Quality or Stiffness Measured by Ultrasonography and Range of Motion in Hospitalized Older Adults. *Ultrasound in Medicine and Biology*, *48*(9), 1858–1866. <https://doi.org/10.1016/j.ultrasmedbio.2022.05.016>
- Kusumastuti, A., Khoiron, A, M., & Achmadi, T, A. (2020). *Metode Penelitian Kuantitatif*. Deepublis.
- Kusumo, M. prasetyo. (2020). *Buku Lansia. Buku Lansia. november*, 64. <https://id1lib.org/book/17513624/1d56ea>
- Lee, P.-A., Wu, K.-H., Lu, H.-Y., Su, K.-W., Wang, T.-M., Liu, H.-C., & Lu, T.-W. (2019). Compromised balance control in older people with bilateral medial knee osteoarthritis during level walking. *Scientific Reports*, *11*(1), 3742.
- Lee, S., & Kim, H. (2021). Gender differences in knee joint range of motion among elderly populations. *International Journal of Rehabilitation Sciences*, *19*(4), 278–290.
- Lintin, G. B. R., & Miranti, M. (2020). Hubungan Penurunan Kekuatan Otot Dan Massa Otot Dengan Proses Penuaan Pada Individu Lanjut Usia Yang Sehat Secara Fisik. *Healthy Tadulako Journal (Jurnal Kesehatan Tadulako)*, *5*(1), 1–5. <https://doi.org/https://doi.org/10.22487/htj.v5i1.105>
- Listyarini, A. D., & Alvita, G. W. (2018). Pengaruh Balance Exercise Terhadap Keseimbangan Tubuh Lansia di Desa Singocandi Kabupaten Kudus. *JIKO (Jurnal Ilmiah Keperawatan Orthopedi)*, *2*(2), 31–38. <https://doi.org/10.46749/jiko.v2i2.14>
- Luhung, M., Vinsur, E. Y. Y., & Purwandhani, E. L. W. (2023). Pengaruh latihan Range Of Motion (ROM) Aktif Terhadap Keaktifan Fisik Lansia Di Lembaga Kesejahteraan Sosial Lanjut Usia (LKS-LU) Pangesti Lawang. *Mahesa : Malahayati Health Student Journal*, *3*(1), 182–192. <https://doi.org/DOI:https://doi.org/10.33024/mahesa.v3i1.9274>
- Maghfuroh, L., Yelni, A., & Rosmayanti, L. M. (2023). Asuhan Lansia : makna, identitas, transisi, dan manajemen kesehatan. In *Kaizen Media Publishin* (pp. 1–11). Kaizen Media Publishin.
- Mahendra, I. D. G. A., Wardhani, I. L., Sulastrri, N., & Melaniani, S. (2022). effect of the otago exercise program on the lower extremity muscle strength in older women. *Nternational Journal of Health Sciences (IJHS)*, *6*(S9), 303–313. <https://doi.org/https://doi.org/10.53730/ijhs.v6nS9.12245>
- Manangkot, M. V., Sukawana, I. W., & Witarsa, I. Ma. S. (2019). Pengaruh Senam Lansia Terhadap Keseimbangan Tubuh Pada Lansia Di Lingkungan Dajan

- Bingin Sading. *Jurnal Keperawatan*, April, 24–27.
- Maria, C., Putri, L. M., & Wijaya, H. (2023). Program lansia Aktif Mandiri (LAMAR) Dalam Upaya Deteksi Dini Osteoarthritis. *Community Development in Health Journal*, 1(April), 48–58.
- Mohammad Syaikhuddin. (2020). Pengaruh Foam Rolling Exercise Dan Neuro Mobilisasi Terhadap Fleksibilitas Hamstring Pada Lansia : Narrative Review. *Occupational Medicine*, 53(4), 130.
- Muis, I., Agustang, A., & Adam, A. (2020). Lansia Miskin: Demografi Sosial, Distribusi Pekerjaan, Masalah Kesehatan & Perlindungan Sosial. *Asian Journal of Social Sciences & Humanities*, 9(1), 40–48. [http://www.ajssh.leena-luna.co.jp/AJSSHPDFs/Vol.9\(1\)/AJSSH2020\(9.1-05\).pdf](http://www.ajssh.leena-luna.co.jp/AJSSHPDFs/Vol.9(1)/AJSSH2020(9.1-05).pdf)
- Mujiadi, & Rachmah, S. (2022). Buku Ajar Keperawatan Gerontik. In *STIKes Majapahit Mojokerto*.
- Napu, N., Rosida, L., & Nurhayati, A. . (2022). *Otago Home Exercise Programme Terhadap Peningkatan Kekuatan Otot Ekstremitas Bawah Dan Penurunan Risiko Jatuh Pada Lansia*.
- Nascimento, M. M., Gouveia, É. R., Gouveia, B. R., Marques, A., França, C., Marconcin, P., Freitas, D. L., & Ihle, A. (2023). ex Differences in Falls: The Mediating Role of Gait Stability Ratio and Body Balance in Vulnerable Older Adults. *Journal of Clinical Medicine*, 12(2), 450. <https://doi.org/https://doi.org/10.3390/jcm12020450>
- Nightingale, C. J., Mitchell, S. N., & Butterfield, S. A. (2019). Validation of the Timed Up and Go Test for Assessing Balance Variables in Adults Aged 65 and Older. *Journal of Aging and Physical Activity*, 27(2), 230–233. <https://doi.org/10.1123/japa.2018-0049>
- Nindawi, N., Susilawati, E. F., & Iszakiyah, N. (2021). Efektifitas Latihan Range Of Motion (ROM) Aktif terhadap Tonus Otot Ekstrimitas bawah dan Rentang Gerak Sendi pada Lansia. *Wiraraja Medika : Jurnal Kesehatan*, 11(1), 1–9. <https://doi.org/10.24929/fik.v11i1.1246>
- Nindawi, Susilawat, E. F., & Iszakiyah, N. (2021). Efektifitas Latihan Range Of Motion (ROM) Aktif terhadap Tonus Otot Ekstrimitas bawah dan Rentang Gerak Sendi pada Lansia. *Wiraraja Medika : Jurnal Kesehatan*, 11(1), 1–9. <https://doi.org/https://doi.org/10.24929/fik.v14i2.3298>
- Noor, C. A., & Merijanti, L. T. (2020). Hubungan antara aktivitas fisik dengan fungsi kognitif pada lansia. *Jurnal Biomedika Dan Kesehatan*, 3(1), 8–14. <https://doi.org/10.18051/jbiomedkes.2020.v3.8-14>
- Nugraha, M. H. S. (2024). Balance Problems in the Elderly with Diabetes Mellitus: A Literature Review. *Journal of Mid-Life Health*, 15(2), 55–61. https://doi.org/10.4103/jmh.jmh_29_23

- Nugrahaningtyas, J., Wahjuning, U., & Riansih, C. (2024). The Influence of Hypertension on the Incidence of Body Balance Disorders in the Elderly in the Sleman Regency Area, Yogyakarta in 2023. *International Journal of Integrative Research (IJIR)*, 2(4), 357–366. <https://doi.org/https://doi.org/10.59890/ijir.v2i4.1776>
- Nurlika, S., Azizah, Shanty, C., & Jupri, K. (2020). Penerapan Relaksasi Napas Dalam Saat Dilakukan Range Of Motion Pada Responden Asam Urat Terhadap Nyeri. *Jurnal Ilmu Kesehatan Indonesia*, 2(2). <https://doi.org/10.57084/jiksi.v2i2.672>
- Nurseptiani, D., Setyawan, M. G. M., & Izzat, N. (2022). Gambaran Skala Nyeri Akibat Penurunan Kekuatan Otot Gastrocnemius pada Lansia Pekerja di Posyandu Lansia Pekajangan Gang 16. *Jurnal Fisioterapi Dan Rehabilitasi*, 6(2), 117–122.
- Rabia, G., Imran, N., Muhammad, Imran, A., Faryal, J., Faiza, N., & Tahir, Ahmad, B. (2024). *Aging and Synovial Joint Function: Changes in Structure and Implications for Mobility*. <https://doi.org/10.5772/intechopen.1003866>
- Rahman, F., Budi, I. S., Al Athfal, M. A., Hisanah, H. A., & Haya, A. F. (2022). Program Latihan Keseimbangan Untuk Peningkatan Profil Keseimbangan Individu Lanjut Usia: Critical Review. *Jurnal Riset Kesehatan Poltekkes Depkes Bandung*, 14(1), 23–30. <https://doi.org/10.34011/juriskesbdg.v14i1.1852>
- Rahmi, U., Sylviana, N., Goenawan, H., & Setiawan, S. (2021). Efek bersepeda terhadap proses penuaan pada lanjut usia: Literatur review. *Journal Of Sport Education (JOPE)*, 4(1), 64. <https://doi.org/10.31258/jope.4.1.64-76>
- Ridha, M. R., & Putri, M. E. (2015). Pengaruh Latihan Range of Motion (ROM) Aktif terhadap Kekuatan Otot Ekstremitas Bawah pada Lansia Dengan Osteoarthritis di Wilayah Kerja Puskesmas Koni Kota Jambi. *Jurnal Akademika Baiturrahim*, 4(2), 45–52.
- Safitri, I. dewi, & Norlinta, S. N. O. (2020). *Pemberian Core Stability Exercise Meningkatkan Keseimbangan Dinamis Pada Lansia : Narrative Review Meningkatkan Keseimbangan Dinamis Pada Lansia : Narrative Review*.
- Sari, C. W. M., Rahma, V. R., Jatiningtyas, K., Salsabella, E. S., Dinan, N. A., Masroorianissa, A. F., & Hidayatulloh, P. S. Z. (2023). Latihan Berjalan Meningkatkan Kekuatan Otot dan Keseimbangan pada Lansia dengan Risiko Jatuh: A Scoping Review. *Jurnal Citra Keperawatan*, 11(1), 61–70. <https://doi.org/10.31964/jck.v11i1.306>
- Sari, M. E., Komalasari, D. R., -, W., & Naufal, A. F. (2022). Hubungan Kekuatan Otot Ekstremitas Bawah, Fungsi Kognitif Dan Keseimbangan Tubuh Pada Lanjut Usia Di Daerah Rural, Surakarta. *Physio Journal*, 2(2), 61–74. <https://doi.org/10.30787/phyjou.v2i2.894>

- Setiorini, A. (2021). Kekuatan Otot pada Lansia. *Junal Kesehatan Unila*, 5(1), 69–74.
- Siti, K., & Rahmawati. (2020). *Perbedaan Pengaruh 12 Balance Exercise Dan Ankle Strategy Exercise Terhadap Keseimbangan Dinamis Lansia: Metode Narrative Review Naskah Publikasi*.
- Song, S., Su-Kyoung, L., & Su-Hong, A. (2024). The effect of kinesio taping on joint range of motion and balance in total knee replacement patients. *Journal of exercise rehabilitation*. *Journal of Exercise Rehabilitation*, 20, 131–136. <https://doi.org/10.12965/jer.2442254.127>
- Stołowski, Ł., Niedziela, M., Lubiowski, B., Lubiowski, P., & Piontek, T. (2023). Validity and reliability of inertial measurement units in active range of motion assessment in the hip joint. *Sensors (Basel, Switzerland)*, 23(21), 8782. <https://doi.org/https://doi.org/10.3390/s23218782>
- Sugiono. (2023). *Metode penelitian Kuantitatif Kualitatif Dan R&D* (Sutopo (ed.); kedua ceta). Alfabeta, cv.
- Tavip, I., Warijan, W., & Joni, S. (2020). *Pengaruh Range of Motion (ROM) Aktif Terhadap Fleksibilitas Sendi Lutut Pada Lanjut Usia*. 1(1), 339–343. <https://doi.org/10.32584/JPI.V4I2.224>
- Tigor Bentar Suminar. (2022). *Analisis pengaruh Stretching Terhadap Peningkatan ROM Di kemampuan Fungsional Pada penderita osteoarthritis Lutut : Literature Review Tahun*. 9, 356–363.
- Tzu-Tung, L., Lin-Yen, C., Chien-Cheng, C., Wei-Ren, P., Yin-Keat, T., Szu-Fu, C., & Fu-Cheng, W. (2024). Age-Related Influence on Static and Dynamic Balance Abilities: An Inertial Measurement Unit-Based Evaluation. *Sensors (Basel, Switzerland)*, 24(21), 7078–7078. <https://doi.org/10.3390/s24217078>
- Utami, R. F., & Syah, I. (2021). Analisis Faktor Yang Mempengaruhi keseimbangan Lansia. *Kajian Ilmiah Problema Kesehatan*, 7(1), 25–29. <https://doi.org/http://doi.org/10.22216/jen.v7i1.712>
- Wang, L., Chen, H., Lu, H., Wang, Y., Liu, C., Dong, X., Chen, J., Liu, N., Yu, F., Wan, Q., & Shang, S. (2020). The effect of transtheoretical model-lead intervention for knee osteoarthritis in older adults: A cluster randomized trial. *Arthritis Research and Therapy*, 22(1), 1–14. <https://doi.org/10.1186/s13075-020-02222-y>
- WHO. (2022). *Penuaan dan Kesehatan*.
- Wijaya, M. P. (2020). *Literature Review : Pengaruh Elastic Band Exercise Dan Progressive Resistance Exercise Terhadap Peningkatan Kemampuan Fungsional Osteoarthritis Knee Pada Lansia Fakultas Ilmu Kesehatan Universitas ' Aisyiyah Yogyakarta Literature Review : Pengaruh Elastic* .
- Wijayani, N. K. W., Wahyudi, A. T., & Darmawijaya, I. P. (2022). Keseimbangan

Dinamis Dengan Kecepatan berjalan Pada Lansia Di Banjar Celuk Buruan Gianyar. *Journal of Innovation Research and Knowledge*, 2(5), 2097–2104.

Wu, H., Wei, Y., Miao, X., Li, X., Feng, Y., Yuan, Z., Zhou, P., Ye, X., Zhu, J., Jiang, Y., & Xia, Q. (2021). Characteristics of balance performance in the Chinese elderly by age and gender. *BMC Geriatrics*, 21(1), 596. <https://doi.org/https://doi.org/10.1186/s12877-021-02560-9>

Xiao, Z., & Li, G. (2021). The effect of Wuqinxi exercises on the balance function and subjective quality of life in elderly, female knee osteoarthritis patients. *American Journal of Translational Research*, 13(6710).

Yanti, N. K. A., Dewi, A. A. N. T. N., Putra, I. N. A., & Artini, I. G. A. (2023). Aktivitas Fisik Berhubungan Dengan Keseimbangan Statis Dan Dinamis Lansia-Sebuah Studi Potong Lintang. *Majalah Ilmiah Fisioterapi Indonesia*, 11(1), 18. <https://doi.org/10.24843/mifi.2023.v11.i01.p04>

Yasemin, T. (2024). *Do Comorbidities and Body Mass Index Influence Shoulder Pain, Disability and Joint Range of Motion*. 21(4), 52. <https://doi.org/0.23950/jcmk/14973>

Yuxiao, G., Eleanor, J., T., S., Nishadi, G., Daniel, W., Stashuk, Jessica, P., Bethan, E., Phillips, Philip, J., Atherton, & Mathew, P. (2024). Sex disparities of human neuromuscular decline in older humans. *The Journal of Physiology*. <https://doi.org/https://doi.org/10.1113/JP285653>

Zhengguang, G., Yang, S., Yangshiyu, Z., & Wenyu, X. (2021). *Design of joint range of motion measurement based on Kinect*. <https://doi.org/doi:10.1109/ITNEC52019.2021.9587199>