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Daftar Pustaka

Aliabadi, S., Moodi, M., Miri, M. R., Tahergorabi, Z., & Mohammadi, R. (2017). Sleep quality and its contributing factors among elderly people: a descriptive-analytical study. *Modern Care Journal*, *14*(1). https://doi.org/10.5812/modernc.64493

Alici, N. K., & Bahceli, P. Z. (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 Journal*, *46*(2), 104-112. 10.1111/opn.12206

Alafi, F., Bahrami, N., Mohamadnia, A., & Farhadinasab, A. (2023). Mood and anxiety disorders, and sleep quality among elderly residents in nursing homes: is there a relationship?. *Minerva Psychiatry*, *64*(3), 302-308. 10.23736/S2724-6612.22.02256-4

Amarya, S., Singh, K., & Sabharwal, M. (2018). Ageing process and physiological changes. In *Gerontology*. IntechOpen. 10.5772/intechopen.76249

Arifin, H., Boy, E., Rizki, D., Sitepu, A., Rangkuti, Z. A., Lailatu, A., Armadi, I. A., Krisna, A. P., Hafianty, F., & Meliala, A. A. (2021). Prevalensi Insomnia pada Perempuan Lanjut Usia : Studi Berbasis Komunitas. 3(1), 6–11. https://doi.org/10.30596/jih.v3i1.11632

Arifin, Z., & Wati, E. (2020). Hubungan kualitas tidur dengan konsentrasi belajar pada mahasiswa keperawatan universitas muhammadiyah

UNIVERSITAS
GADJAH MADA
Pengaruh Terapi Tertawa terhadap Kualitas Tidur Lansia di Balai Pelayanan Sosial Tresna Werdha (BPSTW) Yogyakarta
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Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

purwokerto. *Human Care Journal*, *5*(3), 650-660. http://dx.doi.org/10.32883/hcj.v5i3.797

Ariyanti, S., Bolon, C. M. T., Ritonga, Y. S., Nainggolan, S. H., & Lestari, R. D. (2024). *Keperawatan Gerontik: Pengetahuan Praktis bagi Perawat dan Mahasiswa Keperawatan*. PT. Sonpedia Publishing Indonesia.

Aryadi, I. P. H., Yusari, I. G. A., Dhyani, I. A. D., Kusmadana, I. P. E., & Sudira, P. G. (2018). Korelasi Kualitas Tidur Terhadap Tingkat Depresi, Cemas, Dan Stres Mahasiswa Kedokteran Universitas Udayana. *Jurnal Berkala Neurologi Bali*, *1*, 10-15. 10.29342/cnj.v1i1.4

Astaniah, S., Rahmayanti, D., Setiawan, H., Keperawatan, I., Kedokteran, F., & Lambung, U. (2019). Gambaran sleep hygiene lansia di Panti Sosial Tresna Werdha Budi Sejahtera Provinsi Kalimantan Selatan. *Jurnal Kesehatan: April*.

Astria, N. K. R., & Ariani, N. K. P. (2016). Gambaran kualitas tidur pada lansia di desa adat pecatu, kecamatan kuta selatan, kabupaten badung tahun 2016. *Kedokteran,(Kualitas Tidur Lansia)*, 1-68. 10.24843.MU.2020.V10.i9.P12

Badan Pusat Statistik Indonesia. (29 Desember 2023). *Statistik Penduduk Lanjut Usia 2023*. Diakses pada 15 September 2024, dari https://www.bps.go.id/id/publication/2023/12/29/5d308763ac29278dd5860fad/statistik-penduduk-lanjut-usia-2023.html

Bali, A., Randhawa, P. K., & Jaggi, A. S. (2015). Stress and opioids: role of opioids in modulating stress-related behavior and effect of stress on

UNIVERSITAS
GADJAH MADA
Pengaruh Terapi Tertawa terhadap Kualitas Tidur Lansia di Balai Pelayanan Sosial Tresna Werdha (BPSTW) Yogyakarta
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Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

morphine conditioned place preference. *Neuroscience & Biobehavioral Reviews*, *51*, 138-150. 10.1016/j.neubiorev.2014.12.018

Bains, G. S., Berk, L. S., Daher, N., Lohman, E., Schwab, E., Petrofsky, J., & Deshpande, P. (2014). The effect of humor on short-term memory in older adults: A new component for whole-person wellness. *Advances in mind-body medicine*, *28*(2), 16-24.

Béland, S. G., Préville, M., Dubois, M. F., Lorrain, D., Grenier, S., Voyer, P., ... & Moride, Y. (2010). Benzodiazepine use and quality of sleep in the community-dwelling elderly population. *Aging & mental health*, *14*(7), 843-850. 10.1080/13607861003781833

Biller, J., & Ferro, J. M. (Eds.). (2014). *Neurologic aspects of systemic disease, part I*. Newnes.

Bjorvatn, B., & Fetveit, A. (2012). Søvnproblemer blant eldre. *Norsk epidemiologi*, *22*(2). doi.org/10.5324/nje.v22i2.1564

Blümel, J. E., Cano, A., Mezones-Holguín, E., Barón, G., Bencosme, A., Benítez, Z., ... & Chedraui, P. (2012). A multinational study of sleep disorders during female mid-life. *Maturitas*, *72*(4), 359-366. 10.1016/j.maturitas.2012.05.011

Boyce, R., Glasgow, S. D., Williams, S., & Adamantidis, A. (2016). Causal evidence for the role of REM sleep theta rhythm in contextual memory consolidation. *Science*, *352*(6287), 812-816. doi/abs/10.1126/science.aad5252

UNIVERSITAS
GADJAH MADA
Pengaruh Terapi Tertawa terhadap Kualitas Tidur Lansia di Balai Pelayanan Sosial Tresna Werdha (BPSTW) Yogyakarta
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Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

Carroll, J. E., Seeman, T. E., Olmstead, R., Melendez, G., Sadakane, R., Bootzin, R., ... & Irwin, M. R. (2015). Improved sleep quality in older adults with insomnia reduces biomarkers of disease risk: pilot results from a randomized controlled comparative efficacy trial. *Psychoneuroendocrinology*, *55*, 184-192. 10.1016/j.psyneuen.2015.02.010

Chaudhary, M., Khan, A., & Gupta, M. (2020). Skin ageing: pathophysiology and current market treatment approaches. *Current aging science*, *13*(1), 22-30. 10.2174/1567205016666190809161115

Cheraghi, Z., Shirmohammadi, N., Ilukhani, R., Tayebi, M., Cheraghi, P., & Sadri, M. (2024). Predictors of Poor Sleep Quality in Elderly Individuals in Western Iran: A Population-Based Cross-Sectional Study. *Journal of Research in Health Sciences*, *25*(1), e00642. 10.34172/jrhs.2025.177

Chiang, G. S., Sim, B. L., Lee, J. J., & Quah, J. H. (2018). Determinants of poor sleep quality in elderly patients with diabetes mellitus, hyperlipidemia and hypertension in Singapore. *Primary health care research & development*, *19*(6), 610-615. 10.1017/S146342361800018X

Cuevas-Martinez, K. I., Hernández-Salais, L. H., Reyes, N. G. B., Ferrel, S. L. M., Ramos, E. A. B., & Benavides-Guerrero, C. (2024). Calidad Del Sueno Y Su Relacio Con La Atividad Fisica En Personas Mayores De Tamaulipa, Mexico. *Horizonte de Enfermería*, *35*(3), 1278-1290. 10.7764/Horiz_Enferm.3.3.1278-1290

UNIVERSITAS
GADJAH MADA
Pengaruh Terapi Tertawa terhadap Kualitas Tidur Lansia di Balai Pelayanan Sosial Tresna Werdha (BPSTW) Yogyakarta
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Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

Danish, M., Dratva, M. A., Lui, K. K., Heyworth, N., Wang, X., Malhotra, A., ... & Banks, S. J. (2024). Intersections of Modifiable Risks: Loneliness is Associated with Poor Subjective Sleep Quality in Older Women at Risk for Alzheimer's Disease. *The International Journal of Aging and Human Development*, *99*(4), 505-520. 10.1177/00914150241255888

Della Monica, C., Johnsen, S., Atzori, G., Groeger, J. A., & Dijk, D. J. (2018). Rapid eye movement sleep, sleep continuity and slow wave sleep as predictors of cognition, mood, and subjective sleep quality in healthy men and women, aged 20–84 years. *Frontiers in psychiatry*, *9*, 255. doi.org/10.3389/fpsyt.2018.00255

Deng, M., Zhang, X., Zhu, Y., et al. (2023). The association between loneliness and sleep quality in older adults: A systematic review and meta-analysis. *Archives of Gerontology and Geriatrics, 111*, 104994. 10.1016/j.archger.2022.104994

Desinta, S., & Ramdhani, N. (2013). Terapi tawa untuk menurunkan stres pada penderita hipertensi. *Jurnal Psikologi*, *40*(1), 15-27. https://doi.org/10.22146/jpsi.7063

Dunbar, R. I. M., Frangou, A., Grainger, F., & Pearce, E. (2021). Laughter influences social bonding but not prosocial generosity to friends and strangers. *PLoS One*, *16*(8), e0256229. 10.1371/journal.pone.0256229

Edwards, B. A., O'Driscoll, D. M., Ali, A., Jordan, A. S., Trinder, J., & Malhotra, A. (2010, October). Aging and sleep: physiology and pathophysiology.

UNIVERSITAS
GADJAH MADA
Pengaruh Terapi Tertawa terhadap Kualitas Tidur Lansia di Balai Pelayanan Sosial Tresna Werdha (BPSTW) Yogyakarta
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Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

In *Seminars in respiratory and critical care medicine* (Vol. 31, No. 05, pp. 618-633). © Thieme Medical Publishers.

Erfrandau, A., Murtaqib, M., & Widayati, N. (2017). 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.

Fabbri, M., Beracci, A., Martoni, M., Meneo, D., Tonetti, L., & Natale, V. (2021). Measuring subjective sleep quality: a review. *International journal of environmental research and public health*, *18*(3), 1082. 10.3390/ijerph18031082

Febrian, E. R., & Rahma, I. (2024, October). Hubungan kesepian dengan kualitas tidur pada lansia di Balai Pelayanan Tresna Werdha Unit Budi Luhur Bantul. In *Prosiding Seminar Nasional Penelitian dan Pengabdian Kepada Masyarakat LPPM Universitas' Aisyiyah Yogyakarta* (Vol. 2, pp. 1087-1094).

Ferracioli-Oda, E., Qawasmi, A., & Bloch, M. H. (2018). Meta-analysis: Melatonin for the treatment of primary sleep disorders. *Focus*, *16*(1), 113-118. doi.org/10.1176/appi.focus.1610

Field, A. (2024). *Discovering statistics using IBM SPSS statistics*. Sage publications limited.

UNIVERSITAS
GADJAH MADA
Pengaruh Terapi Tertawa terhadap Kualitas Tidur Lansia di Balai Pelayanan Sosial Tresna Werdha (BPSTW) Yogyakarta
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Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

Freedman, A., & Nicolle, J. (2020). Social isolation and loneliness: the new geriatric giants: approach for primary care. *Canadian Family Physician*, *66*(3), 176-182.

Frohnhofen, H., Schlitzer, J., & Netzer, N. (2017). Schlaf und Schlafstörungen beim alten Menschen. *Somnologie*, *21*(1), 67-81. 10.1007/s11818-017-0102-z

García-Corpas, J.P., Requena, M.J., Piñar Morales, M., (...), Faus, M.J. (2008). *Effect of pharmaceutical intervention on hygiene and quality of sleep in patients over 65 years of age with insomnia*. Pharmaceutical Care España.

Gardiner, C., Laud, P., Heaton, T., & Gott, M. (2020). What is the prevalence of loneliness amongst older people living in residential and nursing care homes? A systematic review and meta-analysis. *Age and ageing*, *49*(5), 748-757. 10.1093/ageing/afaa049

Ghaleni, M. A., Masrour, F. F., Saryar, N., Bratty, A. J., Norouzi, E., de Sousa Fernandes, M. S., & Badicu, G. (2024). Effects of an intervention combining physical activity and components of Amygdala and Insula Retraining (AIR) on sleep and working memory among older male adults. *AIMS neuroscience*, *11*(4), 421. 10.3934/NEUROSCIENCE.2024025

Glass, J., Lanctôt, K. L., Herrmann, N., Sproule, B. A., & Busto, U. E. (2005). Sedative hypnotics in older people with insomnia: meta-analysis of risks and benefits. *Bmj*, *331*(7526), 1169. 10.1136/bmj.38623.768588.47

UNIVERSITAS
GADJAH MADA
Pengaruh Terapi Tertawa terhadap Kualitas Tidur Lansia di Balai Pelayanan Sosial Tresna Werdha (BPSTW) Yogyakarta
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Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

Gulia, K. K., & Kumar, V. M. (2018). Sleep disorders in the elderly: a growing challenge. *Psychogeriatrics*, *18*(3), 155-165. https://doi.org/10.1111/psyg.12319

Ham, O. K., Kim, J., Lee, B. G., & Choi, E. (2017). Behavioral characteristics and cardiovascular disease risks associated with insomnia and sleep quality among middle-aged women in South Korea. *Research in Nursing & Health*, *40*(3), 206-217. 10.1002/nur.21792

Han, E. K., & Son, H. K. (2024). The factors affecting sleep quality in community-dwelling older adults, based on Spielman's 3P model of insomnia. *Iranian Journal of Public Health*, *53*(12), 2739. 10.18502/ijph.v53i12.17317

Han, J. H., Park, K. M., & Park, H. (2017). Effects of laughter therapy on depression and sleep among patients at long-term care hospitals. *Korean Journal of Adult Nursing*, *29*(5), 560-568. 10.7475/kjan.2017.29.5.560

Harrington, J. J., & Avidan, A. Y. (2005). Treatment of sleep disorders in elderly patients. *Current treatment options in neurology*, *7*(5), 339-352. 10.1007/s11940-005-0027-x

Hidayatunisa, N., & Arifin, M. (2021). Gambaran Tingkat Kecemasan Dan Kualitas Tidur Pada Lansia: Literature Review. In *Prosiding Seminar Nasional Kesehatan* (Vol. 1, pp. 2261-2268).

Hirosaki, M., Ohira, T., Wu, Y., Eguchi, E., Shirai, K., Imano, H., ... & Iso, H. (2023). Laughter yoga as an enjoyable therapeutic approach for glycemic control in individuals with type 2 diabetes: A randomized controlled

UNIVERSITAS
GADJAH MADA
Pengaruh Terapi Tertawa terhadap Kualitas Tidur Lansia di Balai Pelayanan Sosial Tresna Werdha (BPSTW) Yogyakarta
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Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

trial. *Frontiers in Endocrinology*, *14*, 1148468. 10.3389/fendo.2023.1148468

Ho, T. T., Warr, M. R., Adelman, E. R., Lansinger, O. M., Flach, J., Verovskaya, E. V., ... & Passegué, E. (2017). Autophagy maintains the metabolism and function of young and old stem cells. *Nature*, *543*(7644), 205-210. doi.org/10.1038/nature21388

Hsu, M. F., Lee, K. Y., Lin, T. C., Liu, W. T., & Ho, S. C. (2021). Subjective sleep quality and association with depression syndrome, chronic diseases and health-related physical fitness in the middle-aged and elderly. *BMC Public health*, *21*, 1-9. https://doi.org/10.1186/s12889-021-10206-z

Hughes, J. M. (2024). Expanding access to CBT-I for older adults: review and expansion of recent recommendations. *Current Sleep Medicine Reports*, *10*(1), 93-101. 10.1007/s40675-023-00271-8

Hughes, J. M., & Martin, J. L. (2022). CBT-I for older adults. In *Adapting cognitive behavioral therapy for insomnia* (pp. 347-366). Academic Press. 10.1016/B978-0-12-822872-2.00005-0

Iannella, G., Maniaci, A., Magliulo, G., Cocuzza, S., La Mantia, I., Cammaroto, G., ... & Vicini, C. (2020). Current challenges in the diagnosis and treatment of obstructive sleep apnea syndrome in the elderly. *POLSKIE ARCHIWUM MEDYCYNY WEWNETRZNEJ*. 10.20452/pamw.15283

Iskander, A., Jairam, T., Wang, C., Murray, B. J., & Boulos, M. I. (2023). Normal multiple sleep latency test values in adults: A systematic review and meta-analysis. *Sleep Medicine*. doi.org/10.1016/j.sleep.2023.06.019

UNIVERSITAS
GADJAH MADA
Pengaruh Terapi Tertawa terhadap Kualitas Tidur Lansia di Balai Pelayanan Sosial Tresna Werdha (BPSTW) Yogyakarta
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Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

Jaqua, E. E., Hanna, M., Labib, W., Moore, C., & Matossian, V. (2022). Common sleep disorders affecting older adults. *The Permanente Journal*, *27*(1), 122. https://doi.org/10.7812/TPP/22.114

Juárez-Rojop, I. E., Fresán, A., Genis-Mendoza, A. D., Cerino-Palomino, C., Nolasco-Rosales, G. A., González-Castro, T. B., ... & Nicolini, H. (2023). Prevalence of Poor Sleep Quality and Associated Factors in Individuals with Rheumatoid Arthritis: A Cross-Sectional Study. *Medicina*, *59*(9), 1633. 10.3390/medicina59091633

Jung, H. W., Youn, C. H., Cho, N. R., Lee, M. K., & Lee, J. B. (2009). The Effect of Laughter Therapy on Sleep in the Community-dwelling Elderly. *Korean Journal of Family Medicine*, *30*(7), 511-518. 10.4082/kjfm.2009.30.7.511

Kaloeti, D. V. S., & Hartati, S. (2017). Subjective well-being dan kecemasan menghadapi kematian pada lansia. *Jurnal Ecopsy*, *4*(3), 138-143. 10.20527/ecopsy.v4i3.4293

Kanbur, S., & Baştemur, Ş. (2023). Why laughing heals? A review on the use of humor in therapy. *Psikiyatride Güncel Yaklaşımlar*, *15*(3), 477-487. 10.18863/pgy.1179671

Kataria M. Laugh for no reason (Terapi tawa). (2004). Jakarta: PT Gramedia Pustaka Utama.

Kim, M., Um, Y. H., Kim, T. W., Kim, S. M., Seo, H. J., Jeong, J. H., ... & Hong, S. C. (2021). Association between age and sleep quality: Findings from a

UNIVERSITAS
GADJAH MADA
Pengaruh Terapi Tertawa terhadap Kualitas Tidur Lansia di Balai Pelayanan Sosial Tresna Werdha (BPSTW) Yogyakarta
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Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

community health survey. *Sleep Medicine Research*, *12*(2), 155-160. https://doi.org/10.17241/smr.2021.01158

Kirkwood, T. (2006). Too fast by mistake. *Nature*, *444*(7122), 1015-1017. 10.1038/4441015a

Klerman, E. B., Davis, J. B., Duffy, J. F., Dijk, D. J., & Kronauer, R. E. (2004). Older people awaken more frequently but fall back asleep at the same rate as younger people. *Sleep*, *27*(4), 793-798. doi.org/10.1093/sleep/27.4.793

Ko, H. J., & Youn, C. H. (2011). Effects of laughter therapy on depression, cognition and sleep among the community-dwelling elderly. *Geriatrics & gerontology international*, *11*(3), 267-274. https://doi.org/10.1111/j.1447-0594.2010.00680.x

Komite Etik Penelitian dan Pengembangan Kesehatan Nasional Kementerian Kesehatan RI. (2021). *Pedoman dan Standar Etik Penelitian dan Pengembangan Kesehatan Nasional*. Badan Penelitian dan Pengembangan Kesehatan Kementerian Kesehatan RI. Diakses pada 15 September 2024, dari https://repository.badankebijakan.kemkes.go.id/id/eprint/4214/1/Pedoman%20dan%20Standar%20Etik%20Penelitian%20dan%20Pengembangan%20Kesehatan%20Nasional.pdf

Kramer, C. K., et al. (2023). Laughter as medicine: A systematic review and meta-analysis. *PLOS ONE, 18*(6), e0286260. https://doi.org/10.1371/journal.pone.0286260

UNIVERSITAS
GADJAH MADA
Pengaruh Terapi Tertawa terhadap Kualitas Tidur Lansia di Balai Pelayanan Sosial Tresna Werdha (BPSTW) Yogyakarta
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Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

Kugler, L., Kuhbandner, C., Gerum, S., Hierl, C., Münster, T., Offereins, B., & Lutterbach, L. S. (2021). Evaluation of a humor training for patients with chronic pain: A randomized clinical trial. *Journal of Pain Research*, 3121-3133. 10.2147/JPR.S313868

Kuo, C. P., Lu, S. H., Huang, C. N., Liao, W. C., & Lee, M. C. (2021). Sleep quality and associated factors in adults with type 2 diabetes: a retrospective cohort study. *International journal of environmental research and public health*, *18*(6), 3025. 10.3390/ijerph18063025

Laili, F. N., & Hatmanti, N. M. (2018). aktivitas fisik dengan kualitas tidur lansia di posyandu lansia wulan erma menanggal surabaya: Physical Activity With Sleep Quality In Elderly Posyandu Wulan Erma Menanggal Surabaya. *Jurnal Ilmiah Keperawatan (Scientific Journal of Nursing)*, 4(1), 7–14. https://doi.org/10.33023/jikep.v4i1.129

Lam, S., & Macina, L. O. (2017). Therapy update for insomnia in the elderly. *The Consultant Pharmacist®*, *32*(10), 610-622. 10.4140/TCP.n.2017.610

Le Bon, O. (2020). Relationships between REM and NREM in the NREM-REM sleep cycle: a review on competing concepts. *Sleep medicine*, *70*, 6-16. doi.org/10.1016/j.sleep.2020.02.004

Leary, E. B., Watson, K. T., Ancoli-Israel, S., Redline, S., Yaffe, K., Ravelo, L. A., ... & Stone, K. L. (2020). Association of rapid eye movement sleep with mortality in middle-aged and older adults. *JAMA neurology*, *77*(10), 1241-1251. doi:10.1001/jamaneurol.2020.2108

UNIVERSITAS
GADJAH MADA
Pengaruh Terapi Tertawa terhadap Kualitas Tidur Lansia di Balai Pelayanan Sosial Tresna Werdha (BPSTW) Yogyakarta
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Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

Lee, Y. S., & Park, H. (2021). The effect of laughter therapy on sleep in community-dwelling elders with sleep disorders. *Journal of Korean Academy of Fundamentals of Nursing*, *28*(3), 297-310. 10.7739/JKAFN.2021.28.3.297

Liang, L., Huang, Y., Xu, R., Wei, Y., Xiao, L., & Wang, G. (2019). Eszopiclone for the treatment of primary insomnia: a systematic review and meta-analysis of double-blind, randomized, placebo-controlled trials. *Sleep Medicine*, *62*, 6-13. doi.org/10.1016/j.sleep.2019.03.016

Liao, H., Liao, S., Gao, Y. J., Mu, J. P., Wang, X., & Chen, D. S. (2022). Correlation between sleep time, sleep quality, and emotional and cognitive function in the elderly. *BioMed Research International*, *2022*. https://doi.org/10.1155/2022/9709536

Lorber, M., Kmetec, S., Davey, A., Mlinar Reljić, N., Fekonja, Z., & Kegl, B. (2023). Associations between sleep quality, frailty, and quality of life among older adults in community and nursing home settings. *International journal of environmental research and public health*, *20*(6), 4937. 10.3390/ijerph20064937

Low, L. F., Brodaty, H., Goodenough, B., Spitzer, P., Bell, J. P., Fleming, R., ... & Chenoweth, L. (2013). The Sydney Multisite Intervention of LaughterBosses and ElderClowns (SMILE) study: cluster randomised trial of humour therapy in nursing homes. *BMJ open*, *3*(1), e002072. 10.1136/bmjopen-2012-002072

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GADJAH MADA
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Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

Madari, S., Golebiowski, R., Mansukhani, M. P., & Kolla, B. P. (2021). Pharmacological management of insomnia. *Neurotherapeutics*, *18*(1), 44-52. https://doi.org/10.1007/s13311-021-01010-z

Malik, S. A. (2022). Silver Sleepers: Sleep and Ageing. In *The Latest Trends in Sleep Medicine* (pp. 168-196). Bentham Science Publishers. 10.2174/9789815051032122010013

Mannem, M., Mehta, T. R., Murala, S., & Bollu, P. C. (2022). Endorphins. In *Neurochemistry in Clinical Practice* (pp. 239-245). Cham: Springer International Publishing. 10.1007/978-3-031-07897-2_12

Marengoni, A., Angleman, S., Melis, R., Mangialasche, F., Karp, A., Garmen, A., ... & Fratiglioni, L. (2011). Aging with multimorbidity: a systematic review of the literature. *Ageing research reviews*, *10*(4), 430-439. doi.org/10.1016/j.arr.2011.03.003

Maryam, R., Rosidawati, F., Ahmad, J., & Irwan, B. (2018). Mengenal Usia Lanjut dan Perawatannya. Jakarta: Salemba Medika

Mazza, M., Della Marca, G., De Risio, S., Mennuni, G. F., & Mazza, S. (2004). Sleep disorders in the elderly. *Clin Ter*, *155*(9), 391-394.

Mbiriri, M. (2020). Laughter Therapy as an Intervention to Promote Psychological Well-Being. *J. Humanit. Soc. Policy*, *6*, 2020.

Memarian, A., Sanatkaran, A., & Bahari, S. M. (2017). The effect of laughter yoga exercises on anxiety and sleep quality in patients suffering from Parkinson's disease. *Biomedical research and Therapy*, *4*(07), 1463-1479. 10.15419/bmrat.v4i07.200

UNIVERSITAS
GADJAH MADA
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Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

Mendelsohn, A. R., & Larrick, J. W. (2017). Epigenetic drift is a determinant of mammalian lifespan. *Rejuvenation research*, *20*(5), 430-436. doi.org/10.1089/rej.2017.2024

Meyer, E. J., & Wittert, G. A. (2024). Approach the patient with obstructive sleep apnea and obesity. *The Journal of Clinical Endocrinology & Metabolism*, *109*(3), e1267-e1279. doi.org/10.1210/clinem/dgad572

Miner, B., & Kryger, M. H. (2020). Sleep in the Aging Population. *Sleep Medicine Clinics*, *15*(2), 311-318. 10.1016/j.jsmc.2020.02.016

Mitina, M., Young, S., & Zhavoronkov, A. (2020). Psychological aging, depression, and well-being. *Aging (Albany NY)*, *12*(18), 18765. 10.18632/aging.103880

Monk, T. H. (2005). Aging human circadian rhythms: conventional wisdom may not always be right. *Journal of biological rhythms*, *20*(4), 366-374. doi.org/10.1177/0748730405277378

Montgomery, P., & Dianne Shepard, L. (2012). Sleep apnoea and sleep disorders. *Pathy's Principles and Practice of Geriatric Medicine*, *1*, 617-627. 10.1002/9781119952930.ch54

Moreno, C. R. D. C., Santos, J. L. F., Lebrão, M. L., Ulhôa, M. A., & Duarte, Y. A. D. O. (2019). Problemas de sono em idosos estão associados a sexo feminino, dor e incontinência urinária. *Revista brasileira de epidemiologia*, *21*, e180018. 10.1590/1980-549720180018.supl.2

Morgan, K., Gregory, P., Tomeny, M., David, B. M., & Gascoigne, C. (2012). Self-help treatment for insomnia symptoms associated with chronic

UNIVERSITAS
GADJAH MADA
Pengaruh Terapi Tertawa terhadap Kualitas Tidur Lansia di Balai Pelayanan Sosial Tresna Werdha (BPSTW) Yogyakarta
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Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

conditions in older adults: A randomized controlled trial. *Journal of the American Geriatrics Society*, *60*(10), 1803-1810. 10.1111/j.1532-5415.2012.04175.x

Motomura, Y., Katsunuma, R., Yoshimura, M., & Mishima, K. (2017). Two days' sleep debt causes mood decline during resting state via diminished amygdala-prefrontal connectivity. *Sleep*, *40*(10), zsx133. doi.org/10.1093/sleep/zsx133

Neki, N. S. (2015). Oxidative stress and aging. *Bangladesh Journal of Medical Science*, *14*(3), 221. 10.3329/bjms.v14i3.23468

Ohayon, M. M. (2002). Epidemiology of insomnia: what we know and what we still need to learn. *Sleep medicine reviews*, *6*(2), 97-111. doi.org/10.1053/smrv.2002.0186

Ohayon, M. M., Carskadon, M. A., Guilleminault, C., & Vitiello, M. V. (2004). Meta-analysis of quantitative sleep parameters from childhood to old age in healthy individuals: developing normative sleep values across the human lifespan. *Sleep*, *27*(7), 1255-1273. doi.org/10.1093/sleep/27.7.1255

Owczarek, M., Nolan, E., Shevlin, M., Butter, S., Karatzias, T., McBride, O., ... & Hyland, P. (2022). How is loneliness related to anxiety and depression: A population-based network analysis in the early lockdown period. *International Journal of Psychology*, *57*(5), 585-596. doi.org/10.1002/ijop.12851

UNIVERSITAS
GADJAH MADA
Pengaruh Terapi Tertawa terhadap Kualitas Tidur Lansia di Balai Pelayanan Sosial Tresna Werdha (BPSTW) Yogyakarta
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Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

Özer, Z., & Ateş, S. (2021). Effects of laughter yoga on hemodialysis patients' plasma-beta endorphin levels, pain levels and sleep quality: a randomized controlled trial. *Complementary therapies in clinical practice*, *43*, 101382. 10.1016/j.ctcp.2021.101382

Peever, J., & Fuller, P. M. (2017). The biology of REM sleep. *Current biology*, *27*(22), R1237-R1248.

Porter, V. R., Buxton, W. G., & Avidan, A. Y. (2015). Sleep, cognition and dementia. *Current psychiatry reports*, *17*, 1-11. 10.1007/s11920-015-0631-8

Pradnyadiansari, N. P. E., Kristianingsih, Y., & Lusiana, T. E. (2017). Terapi tawa menurukan depresi lansia. *JPK: Jurnal Penelitian Kesehatan*, *7*(2), 78-83. doi.org/10.54040/jpk.v7i2.113

Qato, D. M., Wilder, J., Schumm, L. P., Gillet, V., & Alexander, G. C. (2016). Changes in prescription and over-the-counter medication and dietary supplement use among older adults in the United States, 2005 vs 2011. *JAMA internal medicine*, *176*(4), 473-482. doi:10.1001/jamainternmed.2015.8581

Quentin, E., Belmer, A., & Maroteaux, L. (2018). Somato-dendritic regulation of raphe serotonin neurons; a key to antidepressant action. *Frontiers in neuroscience*, *12*, 982. 10.3389/fnins.2018.00982

Raudhoh, S., & Pramudiani, D. (2021). Lansia asik, lansia aktif, lansia poduktif. *Medical Dedication (Medic): Jurnal Pengabdian Kepada Masyarakat*

UNIVERSITAS
GADJAH MADA
Pengaruh Terapi Tertawa terhadap Kualitas Tidur Lansia di Balai Pelayanan Sosial Tresna Werdha (BPSTW) Yogyakarta
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Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

FKIK UNJA, *4*(1), 126-130. https://doi.org/10.22437/medicaldedication.v4i1.13458

Reed, D. L., & Sacco, W. P. (2016). Measuring sleep efficiency: what should the denominator be?. *Journal of clinical sleep medicine*, *12*(2), 263-266. doi.org/10.5664/jcsm.5498

Riemann, D., Dressle, R. J., Benz, F., Spiegelhalder, K., Johann, A. F., Nissen, C., ... & Feige, B. (2024). Chronic insomnia, REM sleep instability and emotional dysregulation: A pathway to anxiety and depression?. *Journal of sleep research*, e14252. 10.1111/jsr.14252

Rohma, N. M., Sari, R. M., & Andayani, S. (2023). Terapi Tawa pada Lansia. *Journal of Telenursing (JOTING)*, *5*(1), 254-262. 10.31539/joting.v5i1.5111

Rofikoh, A., & Jatimi, A. (2024). Laporan Kasus: Penerapan Terapi Tertawa Dengan Menonton Video Wayang Cenk Blonk Pada Pasien Ansietas. *Indonesian Health Science Journal*, *4*(1), 21-26.

Sabilla, M., Mustakim, F. S., Ariasih, R. A., Efendi, R., & Febrianti, T. (2020, October). Community services in pandemic situation: Preparing quality of life in middle age group through social media education "Kulwap"(Kuliah Whatsapp). In *International Conference On Health Science* (pp. 20-25).

Sadler, P., McLaren, S., Klein, B., Harvey, J., & Jenkins, M. (2018). Cognitive behavior therapy for older adults with insomnia and depression: a

UNIVERSITAS
GADJAH MADA
Pengaruh Terapi Tertawa terhadap Kualitas Tidur Lansia di Balai Pelayanan Sosial Tresna Werdha (BPSTW) Yogyakarta
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Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

randomized controlled trial in community mental health services. *Sleep*, *41*(8), zsy104. 10.1093/sleep/zsy104

Santos-Orlandi, A. A. D., Ottaviani, A. C., Alves, E. D. S., Brito, T. R. P. D., & Inouye, K. (2024). Sleep quality of vulnerable elderly people: associated factors. *Revista Brasileira de Enfermagem*, *77*(Suppl 3), e20230283. 10.1590/0034-7167-2023-0283

Schumacher, B., Pothof, J., Vijg, J., & Hoeijmakers, J. H. (2021). The central role of DNA damage in the ageing process. *Nature*, *592*(7856), 695-703. 10.1038/s41586-021-03307-7

Singh, D., Singh, P., Srivastava, P., Kakkar, D., Pathak, M., & Tiwari, A. K. (2023). Development and challenges in the discovery of 5-HT1A and 5-HT7 receptor ligands. *Bioorganic Chemistry*, *131*, 106254. 10.1016/j.bioorg.2022.106254

Sokwalla, S. M. R., Joshi, M. D., Amayo, E. O., Acharya, K., Mecha, J. O., & Mutai, K. K. (2017). Quality of sleep and risk for obstructive sleep apnoea in ambulant individuals with type 2 diabetes mellitus at a tertiary referral hospital in Kenya: a cross-sectional, comparative study. *BMC endocrine disorders*, *17*, 1-8. Doi: 10.1186/s12902-017-0158-6

Sorathia, L. T., & Ghori, U. K. (2016). Sleep disorders in the elderly. *Current Geriatrics Reports*, *5*(2), 110-116. 10.1007/s13670-016-0175-8

Sugiyono. (2015). Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Bandung: Alfabeta.

UNIVERSITAS
GADJAH MADA
Pengaruh Terapi Tertawa terhadap Kualitas Tidur Lansia di Balai Pelayanan Sosial Tresna Werdha (BPSTW) Yogyakarta
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Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

Sulistiyani, C. (2012). Beberapa faktor yang berhubungan dengan kualitas tidur pada mahasiswa Fakultas Kesehatan Masyarakat Universitas Diponegoro Semarang. *Jurnal Kesehatan Masyarakat Universitas Diponegoro*, *1*(2), 18762.

Sunarti, S., & Helena, H. (2018). Gangguan Tidur pada Lanjut Usia. *Journal of Islamic Medicine*, *2*(1), 1-15. https://doi.org/10.18860/jim.v2i1.5009

Suzuki, K., Miyamoto, M., & Hirata, K. (2017). Sleep disorders in the elderly: Diagnosis and management. *Journal of general and family medicine*, *18*(2), 61-71. https://doi.org/10.1002/jgf2.27

Taghinejad, H., Otaghi, M., Raiesifar, A., Sayeh Miri, K., & Sahami Gilan, M. (2024). Effects of a Cognitive Behavioral Therapy Program on Sleep Quality and General Health of Older Men Living in Nursing Homes: A Randomized Clinical Trial. *Iranian Journal of Psychiatry and Clinical Psychology*, *30*(1), 0-0. 10.32598/ijpcp.30.5070.1

Tatineny, P., Shafi, F., Gohar, A., & Bhat, A. (2020). Sleep in the Elderly. *Missouri medicine*, *117*(5), 490. Retrieved from https://pmc.ncbi.nlm.nih.gov/articles/PMC7723148/

Tranah, G. J., Stone, K. L., & Ancoli-Israel, S. (2017). Circadian rhythms in older adults. In *Principles and practice of sleep medicine* (pp. 1510-1515). Elsevier.

Trnka, R., Cabelkova, I., Kuška, M., & Nikolai, T. (2019). Cognitive decline influences emotional creativity in the elderly. *Creativity Research Journal*, *31*(1), 93-101. 10.1080/10400419.2019.1577205

UNIVERSITAS
GADJAH MADA
Pengaruh Terapi Tertawa terhadap Kualitas Tidur Lansia di Balai Pelayanan Sosial Tresna Werdha (BPSTW) Yogyakarta
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Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

Utami, R. J., Indarwati, R., & Pradanie, R. (2021). Analisa Faktor Yang Mempengaruhi Kualitas Tidur Lansia Di Panti. *Jurnal Health Sains*, *2*(3), 362-380. doi.org/10.46799/jhs.v2i3.135

Vaz Fragoso, C. A., & Gill, T. M. (2007). Sleep Complaints in Community-Living Older Persons: A Multifactorial Geriatric Syndrome: (See Editorial Comments by Dr. Michael V. Vitiello on pp 1882–1883). *Journal of the American Geriatrics Society*, *55*(11), 1853-1866. doi.org/10.1111/j.1532-5415.2007.01399.x

Wang, Y., Li, J., Fu, P., Jing, Z., & Zhou, C. (2021). Social engagement and sleep quality among older adults in rural China: is there a sex difference?. *Journal of the American Medical Directors Association*, *22*(10), 2140-2146. 10.1016/j.jamda.2020.11.014

Wen, B., Li, Y., Zhang, M., & Xu, H. (2024). Association of dysphagia and loneliness and their interaction with sleep quality among older adults in nursing homes: A cross-sectional study. *Plos one*, *19*(9), e0311024. 10.1371/journal.pone.0311024

Whale, K., & Gooberman Hill, R. (2022). The importance of sleep for people with chronic pain: current insights and evidence. *Journal of Bone and Mineral Research Plus*, *6*(7), e10658. 10.1002/jbm4.10658

Wijayanti, S. N. (2019). *Hubungan Loneliness Level Dengan Kualitas Tidur Lansia Di Panti Sosial Tresna Werdha Unit Abiyoso Pakem Sleman Yogyakarta* (Doctoral dissertation, Universitas' Aisyiyah Yogyakarta).

UNIVERSITAS
GADJAH MADA
Pengaruh Terapi Tertawa terhadap Kualitas Tidur Lansia di Balai Pelayanan Sosial Tresna Werdha (BPSTW) Yogyakarta
Kaila Fitria Isnain, Purwanta, S.Kp., M.Kes.; Dr. Heru Subekti, S.Kep., Ns., MPH
Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

World Health Organization. World report on ageing and health. Geneva: World Health Organization; 2015

Wu, J. W., Yaqub, A., Ma, Y., Koudstaal, W., Hofman, A., Ikram, M. A., ... & Goudsmit, J. (2021). Biological age in healthy elderly predicts aging-related diseases including dementia. *Scientific reports*, *11*(1), 15929. doi.org/10.1038/s41598-021-95425-5

Yekti Setiyorini. (2016). Hubungan kualitas tidur dengan tekanan darah pada lansia hipertensi di gamping sleman yogyakarta. Naskah Publikasi, 12. Retrieved from http://digilib.unisayogya.ac.id

Yim, J. (2016). Therapeutic benefits of laughter in mental health: a theoretical review. *The Tohoku journal of experimental medicine*, *239*(3), 243-249. 10.1620/tjem.239.243

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. 10.1002/nop2.190

Yücel, R. K., Özdemir, F., Ulucan, H. U., & Yücel, S. H. (2025). Endogenous opioid system in pain management: Mechanisms, influences, and clinical Implications. *Deneysel ve Klinik Tıp Dergisi*, *42*(2), 207-211. 10.52142/omujecm.42.2.15

Yu, B., Steptoe, A., Niu, K., Ku, P. W., & Chen, L. J. (2018). Prospective associations of social isolation and loneliness with poor sleep quality in

UNIVERSITAS
GADJAH MADA
Pengaruh Terapi Tertawa terhadap Kualitas Tidur Lansia di Balai Pelayanan Sosial Tresna Werdha (BPSTW) Yogyakarta
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Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

older adults. *Quality of Life Research*, *27*(3), 683-691. 10.1007/s11136-017-1752-9

Yusamah, U. B. (2020). Layanan Dukungan Psikososial Bagi Lanjut Usia di Panti Sosial Tresna Werdha DKI Jakarta (Studi Kasus di PSTW Budi Mulya 3, DKI Jakarta). *Jurnal Pembangunan dan Administrasi Publik*.

Zhao, Y., & Wang, Y. (2016). Tai Chi as an intervention to reduce falls and improve balance function in the elderly: a meta-analysis of randomized controlled trials. *Chinese nursing research*, *3*(1), 28-33. doi.org/10.1016/j.cnre.2015.10.003

Zhu, X., Hu, Z., Nie, Y., Zhu, T., Chiwanda Kaminga, A., Yu, Y., & Xu, H. (2020). The prevalence of poor sleep quality and associated risk factors among Chinese elderly adults in nursing homes: A cross-sectional study. *PloS one*, *15*(5), e0232834. doi.org/10.1371/journal.pone.0232834

Zilioli, S., & Jiang, Y. (2021). Endocrine and immunomodulatory effects of social isolation and loneliness across adulthood. *Psychoneuroendocrinology*, *128*, 105194. 10.1016/j.psyneuen.2021.105194