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Harnessing Autosuggestion Techniques to Manage Hypertension in the Elderly: A Novel Intervention for Improved Health Outcomes and Quality of Life

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Abstract.
Background: Hypertension is a significant health problem among the elderly population, with an estimated prevalence ranging from 60% to 80%. Proper treatment of hypertension in the elderly is essential, as it can lead to decreased quality of life, difficulties in social and physical functioning, and an increased risk of cardiovascular and cerebrovascular diseases. Objective: This study explores the potential use of autosuggestive techniques as a new intervention in managing hypertension in the elderly to improve health outcomes and quality of life. Method: The method used is bibliometric analysis to map and synthesize related literature in the Scopus reputable database. Key Results: The main results of the analysis show that managing hypertension in the elderly requires a comprehensive approach, including knowledge, attitudes, and practice (KAP) intervention models, family support, and the development of self-empowerment models. Autosuggestive techniques have the potential to be integrated into this approach as a novel intervention that can improve blood pressure control and quality of life in older people with hypertension. Conclusion: This study concludes that autosuggestive techniques can be a promising intervention to improve health outcomes and quality of life in the elderly with hypertension. Integrating these techniques into a comprehensive hypertension management approach can provide significant benefits to the elderly population.

Keywords: Autosuggestion Techniques, Bibliometric Analysis, Elderly, Health Outcomes, Hypertension, Quality of Life

1. INTRODUCTION

Hypertension is a significant health problem in the elderly population, with an estimated prevalence of 60-80% at the age of 60 years and above. Hypertension also occurs in developed countries such as Canada, where most patients are adults and children (Rabi et al., 2020). As one of the most common NCDs with a high incidence and long course of disease, hypertension is a major risk factor for inducing cardiovascular disease (Bintoro & Helianthi, 2022; Li et al., 2023).

Proper management of hypertension in the elderly is very important, as it can have an impact on decreased quality of life, difficulties in social and physical functioning, and an increased risk of cardiovascular and cerebrovascular diseases (Triatin et al., 2023). Various intervention models and strategies have been explored to improve the management of hypertension and quality of life in the elderly. The knowledge, attitudes, and practice (KAP) intervention model is promising. Study by (Kurnia et al. 2020; Wijaya, Athiyah, and Hermansyah 2020). After 1 year of KAP intervention, hypertensive patients' systolic and

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diastolic blood pressure decreased by an average of 16.00 and 5.31 mmHg, and the hypertension control rate increased from 20.37% to 74.40%. This shows that KAP intervention can effectively manage hypertension in the elderly (Wijaya, Athiyah, and Hermansyah 2020).

Another important factor in managing hypertension in the elderly is the role of family support. Studies (Breznoscakova et al., 2023; Otte et al., 2020; Setiyaningsih, Tamtomo, and Suryani, 2016) found that family assistance in the implementation of hypertension self-management is very important for the elderly because the family is the main support system for the elderly in care, including maintaining mental status, anticipating socio-economic changes, and providing motivation and facilitating the spiritual needs of the elderly. This family support can contribute to increased adherence to medication and better blood pressure control. The quality of life of elderly patients with hypertension is also an important consideration. (Breznoscakova et al. 2023; Otte et al. 2020; Setiyaningsih, Tamtomo, and Suryani 2016) Found that drug use compliance factors can cause a decline in quality of life, so older people need family support that plays an active role in their health. Setyarini (Setyarini, 2023) further emphasizes the importance of social support from family, friends, and the community in supporting good self-management in the elderly with hypertension.

Challenges in the self-management of hypertension in the elderly have also been explored. (Khezri et al. 2017) identified several challenges, including awareness of change, coping, autonomy, role performance, sense of control, assumed satisfaction, and self-management. Understanding and addressing these challenges can help in the development of an effective self-management empowerment model for older people with hypertension. In addition, the relationship between hypertension and quality of life in the elderly has also been studied. (Alencar de Pinho et al. 2019; Alencar and Sardinha 2019) Found that a more positive evaluation of the quality of life among the elderly can result from strategies developed for emotional compensation, even when exposed to chronic diseases such as hypertension (Kurdi, Putri, and Susanto 2024; Zulfitri, Agrina, and Husnawati 2022; Zulfitri & Sabrina, 2019) further highlighted the relationship between healthy lifestyle, blood pressure control, and improving quality of life in the elderly with hypertension.

Hypertension in the elderly also has specific management challenges. Factors such as susceptibility, polypharmacy, and the risk of serious fall injuries need to be considered in managing hypertension in the elderly. (Y. Wang et al. 2015; Xiao et al. 2021) found that early detection and treatment of hypertension can help avoid negative impacts on life expectancy and quality of life. Overall, the reviewed literature suggests that multifaceted approaches,

including KAP intervention models, family support, and addressing self-management challenges, can effectively manage hypertension and improve the quality of life in the elderly population. Autosuggestive techniques, as a new intervention, have the potential to be integrated into this comprehensive approach to improve hypertension management further and promote better health outcomes and quality of life for the elderly.

This study explores the potential use of autosuggestive techniques as a new intervention in managing hypertension in the elderly to improve health outcomes and quality of life. Bibliometric analysis maps and synthesizes related literature, providing insight into research trends and identifying opportunities for developing innovative interventions. Bibliometric analysis is a useful tool for mapping and analyzing the intellectual structure of a research field (Lee et al., 2024; Mohammadi et al., 2022). Through this analysis, research trends, themes, and developments can be identified, as well as insights into research productivity, collaboration, and impact can be gained. In the context of this study, bibliometric analysis can provide a comprehensive picture of the status of research related to the management of hypertension in the elderly, including identifying gaps and opportunities for the development of innovative autosuggestive-based interventions.

2. METHODS

Research Design

This study uses a bibliometric analysis approach to map and synthesize literature on autosuggestive techniques for managing hypertension in the elderly. Bibliometric analysis is a quantitative method used to analyze scientific publication patterns, trends, and intellectual structures in a research field (Lan et al., 2023; X Wang et al., 2023).

Data Source

The data for the bibliometric analysis were obtained from the Scopus database, one of the leading databases for international scientific publications. Scopus was chosen because it provides a wide and comprehensively indexed coverage of literature related to the health and social sciences.

Inclusion and Exclusion Criteria

The analyzed articles included research publications, systematic reviews, and meta-analyses that addressed hypertension in the elderly population and/or the use of autosuggestive techniques in managing health conditions. Irrelevant articles, such as those that focus on non-elderly populations or do not address hypertension or autosuggestion, will be excluded.

Analysis Procedure

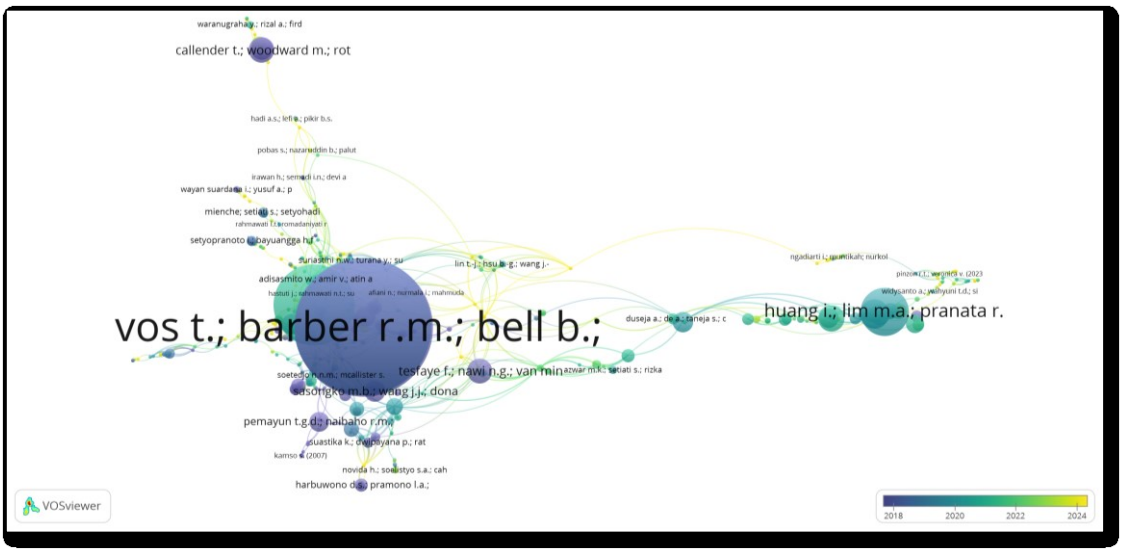
Bibliometric analysis will be carried out using VOSviewer and R. Studio software. The analysis techniques that will be used include Co-citation analysis, which will identify intellectual

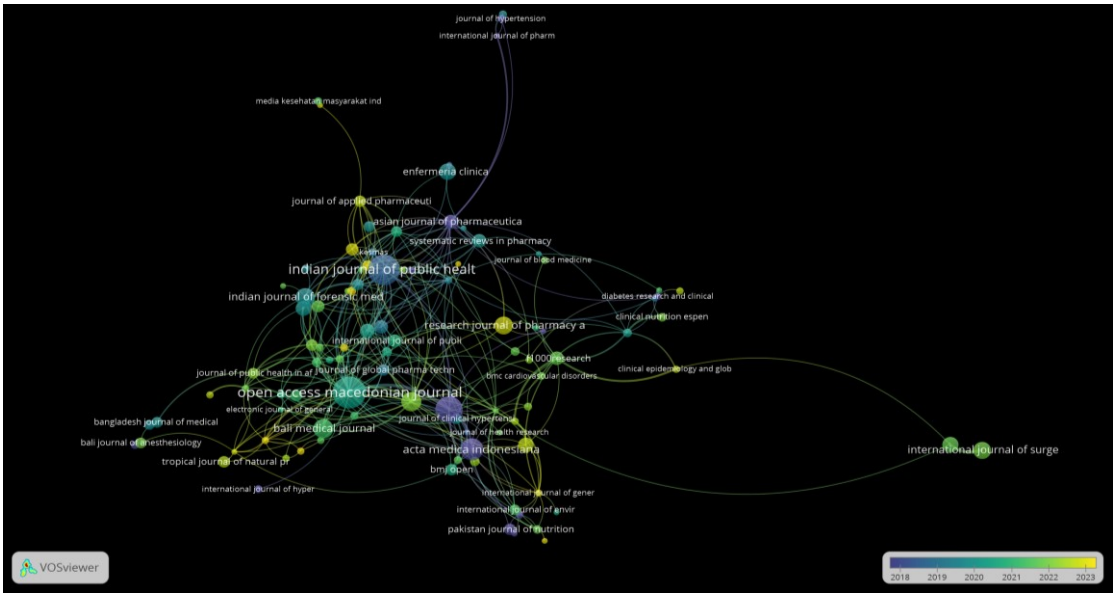
structures and patterns of collaboration in the field of research; keyword analysis, which will determine the main topics and research trends; and productivity analysis, which will evaluate publication trends, citations, and author collaborations.

Variables Analyzed

The variables that will be analyzed in this study include the number of publications per year, Number of citations per publication, Authorship collaboration (co-authorship), Main topics researched (based on keyword analysis), Journal with the most publications, and Countries with the highest research productivity. The results of this analysis will provide a comprehensive overview of the research status related to the use of autosuggestive techniques in managing hypertension in the elderly, as well as identify future research opportunities and directions.

3. RESULTS





4. DISCUSSION

Interpretation of Results

Bibliometric analysis shows that research related to the management of hypertension in the elderly has grown rapidly in the last decade. The main topics studied include self-management, family support, quality of life, and specific challenges in the elderly population. These findings align with previous research that emphasizes the importance of a comprehensive approach in managing hypertension in the elderly (Rasmawati et al. 2022; Wiliyanarti, Wulandari, and Sumarliyah 2024).

Clinical Implications

The analysis's results indicate that autosuggestive techniques have the potential to be integrated into the approach to hypertension management in the elderly. This technique can improve blood pressure control and quality of life in older adults with hypertension through stress reduction, increased motivation, and self-empowerment (Awad et al., 2019; Pagnini et al., 2010).

Recommendations

For clinical practice, it is recommended that hypertension management in the elderly is carried out through a multifaceted approach, which includes:

1. KAP intervention model to improve knowledge, attitudes, and self-management practices (S. Wang et al. 2020; Xiaoyan Wang et al. 2021; Yang et al. 2014, 2014).
2. Family support plays an active role in the care and motivation of older people (Rasmawati et al. 2022) (Mahmudiono et al. 2023; Setyawati and Hastuti 2016).
3. Development of a self-empowerment model that considers specific challenges in older people (Khezri et al. 2017).
4. Integration of autosuggestive techniques as a new intervention that can improve blood pressure control and quality of life (Kania Rahsa Puji et al., 2023; Munandar, 2022; Sari et al., 2017)
5. For further research, it is recommended that experimental studies be conducted to evaluate the effectiveness of autosuggestive-based interventions in managing hypertension in the elderly population. In addition, qualitative analysis can be carried out to understand the perception and experience of older people by using autosuggestive techniques.

5. CONCLUSION

The bibliometric analysis conducted in this study provides valuable insights into the current state of research on using autosuggestion techniques in managing hypertension among the elderly population. The main findings are as follows: Increasing Research Interest: The number of publications on this topic has steadily increased over the past two decades, suggesting a potential for autosuggestion techniques for hypertension management in the elderly. Potential Benefits of Autosuggestion: The existing literature highlights the effectiveness of autosuggestion in reducing stress and anxiety, which is known to contribute to increased blood pressure. Additionally, autosuggestion can empower patients to take an active role in their health management, an important aspect of managing chronic conditions such as hypertension. Implications for Health Outcomes and Quality of Life: Integrating autosuggestion techniques into the comprehensive management of hypertension in older populations can positively impact their overall health outcomes and quality of life. By providing non-pharmacological interventions that can be given on their own, autosuggestion can help reduce dependence on antihypertensive medications and improve adherence to lifestyle modifications.

This research is important because it demonstrates the potential of autosuggestion techniques to address the prevalent and impactful hypertension problem among the elderly. By harnessing the power of self-relaxation and emotional regulation, autosuggestion can improve blood pressure control, reduce drug-related side effects, and improve overall well-being for older people.

Several recommendations for future research can be made to advance this field further: Develop and evaluate the effectiveness of comprehensive autosuggestion-based interventions for hypertension management in older adults through well-designed clinical trials and longitudinal studies. Investigate how autosuggestion can affect physiological parameters, such as blood pressure, and their impact on medication adherence and lifestyle modifications. Explore the sustainability and long-term scalability of autosuggestion-based interventions in managing hypertension among older populations, considering accessibility, feasibility, and patient engagement. Expand the geographic and cultural diversity of research in this field, as the prevalence and management of hypertension can vary across different regions and populations.

By discussing the direction of this research, the potential of autosuggestion techniques in managing hypertension among the elderly can be further explored and utilized to improve this vulnerable population's health outcomes and quality of life.

6. LIMITATION

Bibliometric analysis has several limitations, including: the database's scope is limited, which only includes indexed publications in Scopus. The database may bias its indexing and classification of articles. There are also limitations in analyzing the content and methodological quality of the analyzed publications. Therefore, the results of this analysis need to be complemented by a systematic review and meta-analysis to obtain a more comprehensive picture of the effectiveness of autosuggestive-based interventions in managing hypertension in the elderly.

BIBLIOGRAPHY

Alencar, L.C.R., et al. (2019). "Hypertensive Elderly People: Assessing the Quality of Life." *Acta Scientiarum - Health Sciences* 41(1). https://www.scopus.com/inward/record.uri?eid=2-s2.0-85075716714&doi=10.4025%2Factascihealthsci.v41i1.44652&partnerID=40&md5=7da9d36a664ccd67792ef9cbd7ccf58a.

Alencar-de-Pinho, N., et al. (2019). "Considerable International Variation Exists in Blood Pressure Control and Antihypertensive Prescription Patterns in Chronic Kidney Disease." *Kidney International* 96(4), 983–94. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85072224157&doi=10.1016%2Fj.kint.2019.04.032&partnerID=40&md5=3bc14bbd9cedb6a3012b769fb601d266.

Bintoro, D.A., Helianthi, D.R. (2022). "Combination of Battlefield Acupuncture and Local Point Acupuncture for Post Laparotomy Scar Pain." *Medical Acupuncture* 34(1): 66–70. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85125065730&doi=10.1089%2Facu.2020.1522&partnerID=40&md5=3b27aefd1da54b321236aaf201387b7a.

Breznoscakova, D, Kovanicova, M., Sedlakova, E., Pallayova. M., (2023). "Autogenic Training in Mental Disorders: What Can We Expect?" *International Journal of Environmental Research and Public Health* 20(5). https://www.scopus.com/inward/record.uri?eid=2-s2.0-85149810376&doi=10.3390%2Fijerph20054344&partnerID=40&md5=80bb4c12913be3b41a03bda006055147.

Khezri, R., et al. (2017). "Empowerment in the Self-Management of Hypertension: Challenges from the Perspective of Iranian Elderly Patients." *Journal of Research and Health* 7(1): 603–13. http://dx.doi.org/10.18869/acadpub.jrh.7.1.603.

Kurdi, F., Putri, M.S., Susanto, T., (2024). "The Relationship between Self-Care Management with Quality of Life at Elderly with Hypertension in Nursing Home of Jember." *Working with Older People*. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85199993401&doi=10.1108%2FWWOP-01-2024-0004&partnerID=40&md5=b5d2889056b729c536918c7d1338245b.

Kurnia, A.D., et al. (2020). "The Effect of Educational Program on Hypertension Management Toward Knowledge and Attitude Among Uncontrolled Hypertension Patients in Rural Area of Indonesia." *International Quarterly of Community Health Education*. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85097065751&doi=10.1177%2F0272684X20972846&partnerID=40&md5=f82779d485b72a4ae15948707dd07e9a.

Lan, L., et al. (2023). "Medical Behaviours and Medication Adherence of Older Hypertensive Patients in Different Medical Insurance Programs in Beijing, China: A Cross-Sectional Study." *BMC Geriatrics* 23(1). https://www.scopus.com/inward/record.uri?eid=2-s2.0-85180257774&doi=10.1186%2Fs12877-023-04476-y&partnerID=40&md5=522ae989578a73a9b56f1ebf050a3d45.

Lee, J.S., et al. (2024). "Rural and Urban Differences in Hypertension Management Through Telehealth Before and during the COVID-19 Pandemic among Commercially Insured Patients." *American Journal of Hypertension* 37(2): 107–11. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85182588757&doi=10.1093%2Fajh%2Fhpad093&partnerID=40&md5=1a6d233829999a665edcc0ecd681593b.

Li, N., et al. (2023). "Impact of Medication Therapy Management (MTM) Service Model on Multi-Morbidity (MMD) Patients with Hypertension: A Pilot RCT." *BMC* .... https://bmcgeriatr.biomedcentral.com/articles/10.1186/s12877-023-03725-4.

Mahmudiono, T., et al. (2023). "Urine Analysis and Nutrition Status among Elderly in Griya Wardha, Surabaya." *Journal of Public Health in Africa* 14(S2). https://www.scopus.com/inward/record.uri?eid=2-s2.0-85160782017&doi=10.4081%2Fjphia.2023.2563&partnerID=40&md5=c357c17082f6b5f0296b8fdb9d24fa31.

Mohammadi, M., et al. (2022). "Apelin as a Candidate for Hypertension Management; a Systematic Review AndMeta-Analysis on Animal Studies." *Archives of Academic Emergency Medicine* 10(1). https://www.scopus.com/inward/record.uri?eid=2-s2.0-85142228125&doi=10.22037%2Faaem.v10i1.1704&partnerID=40&md5=7238ed80217b59c9e14e3ad4111f83f4.

Munandar, A. (2022). "Psychodrama Model Activities Therapy and Its Impact on Level of Depression in Elderly in the Taman Sari Village, Tanjung Karang Community Health Center Working Area, Mataram City, Indonesia." *Journal of Pharmaceutical Negative Results* 13(2): 108–12. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85140710743&doi=10.47750%2Fpnr.2022.13.02.017&partnerID=40&md5=a8f833a3161771be517a27b34e982781.

Otte, J.L., Janet, S., Carpenter, L.R., Elkins, G.R. (2020). "Self-Hypnosis for Sleep Disturbances in Menopausal Women." *Journal of Women's Health* 29(3): 461–63.

Puji, K.R., Lela., et al. (2023). "Socialization of Causal Factors and Methods to Prevent Hypertension in the Working Area of Pondok Benda Community Health Center South of Tangerang." *Jurnal Abdi Masyarakat* 4(1): 27–43.

Rabi, D.M., et al. (2020). "Hypertension Canada's 2020 Comprehensive Guidelines for the Prevention, Diagnosis, Risk Assessment, and Treatment of Hypertension in Adults and Children." *Canadian Journal of* .... https://www.sciencedirect.com/science/article/pii/S0828282X20301914.

Rasmawati, R, et al (2022). "Lowering Blood Pressure Through Family Assistance on the Implementation of Self-Management of Hypertension Elderly." *Jurnal Gawat* .... http://journal2.stikeskendal.ac.id/index.php/jgd/article/view/666.

Sari, N.K., et al. (2017). "The Role of Autosuggestion in Geriatric Patients' Quality of Life: A Study on Psycho-Neuro-Endocrine-Immunology Pathway." *Social Neuroscience* 12(5): 551–59.

Setiyaningsih, R., Tamtomo, D., Suryani, N. (2016). "Health Belief Model: Determinants of Hypertension Prevention BehaviorinAdults at Community Health Center, Sukoharjo, Central Java." *Journal of Health Promotion and Behavior* 01(03): 160–70.

Setyarini, E.A. (2023). "Illness Perception and Self-Management of Elderly With Hypertension." *Malaysian Journal of Medicine and Health Sciences* 19(s9): 97–101.

Setyawati, I, Hastuti. P., (2016). "Aldosterone Levels and the -344t/c Aldosterone Synthase in Individuals with a Family History of Hypertension." *Bangladesh Journal of Medical Science* 15(3): 435–40. https://www.scopus.com/inward/record.uri?eid=2-s2.0-84994560220&doi=10.3329%2Fbjms.v15i3.25791&partnerID=40&md5=738836a8bb49d9afdded2808992d9e91.

Triatin, R.D., et al. (2023). "Familial Co-Aggregation and Shared Genetics of Cardiometabolic Disorders and Traits: Data from the Multi-Generational Lifelines Cohort Study." *Cardiovascular Diabetology* 22(1). https://www.scopus.com/inward/record.uri?eid=2-s2.0-85174626592&doi=10.1186%2Fs12933-023-02017-w&partnerID=40&md5=410231c4e4401bda4120abd83574699b.

Wang, S., et al. (2020). "A Bibliometric Analysis Using CiteSpace of Publications From 1999 to 2018 on Patient Rehabilitation After Total Knee Arthroplasty." *Medical Science Monitor* 26.

Wang, X., et al. (2021). "A Bibliometric Analysis and Visualization of Photothermal Therapy on Cancer." *Translational Cancer Research* 10(3): 1204–15.

Wang, X., et al. (2023). "Association of Baseline Serum Cholesterol with Benefits of Intensive Blood Pressure Control." *Chinese Medical Journal* 136(17): 2058–65. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85169847786&doi=10.1097%2FCM9.0000000000002474&partnerID=40&md5=82634def946b9b074eee2fbb4e0e7a8f.

Wang, Y., et al. (2015). "Burden of Hypertension in China over the Past Decades: Systematic Analysis of Prevalence, Treatment and Control of Hypertension." *European Journal of Preventive Cardiology* 23(8): 792–800. http://dx.doi.org/10.1177/2047487315617105.

Wijaya, I.N., Athiyah, U., Hermansyah, A. (2020). "Knowledge, Attitude, and Practice of Pharmacists towards Management of Hypertension in Primary Care Centers." *Journal of Basic and Clinical Physiology and Pharmacology* 30(6). https://www.scopus.com/inward/record.uri?eid=2-s2.0-85078339407&doi=10.1515%2Fjbcpp-2019-0319&partnerID=40&md5=b40554bbaaed1987ddc5e03733dd88db.

Wiliyanarti, P.F., Wulandari, F., Sumarliyah, E. (2024). "Knowledge, Eating Patterns, and Hypertension among Elderly in the Coastal Areas of Bangkalan, Indonesia." *International Journal of Public Health Science* 13(1): 276–81. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85182844905&doi=10.11591%2Fijphs.v13i1.23179&partnerID=40&md5=ae161ab6832545495d9ef3fee8f6f2c9.

Xiao, Y., Wu, H., Wang, G., Mei, H. (2021). "Mapping the Worldwide Trends on Energy Poverty Research: A Bibliometric Analysis (1999–2019)." *International Journal of Environmental Research and Public Health* 18(4): 1–22.

Yang, L et al. (2014). "Analysis on Associated Factors of Uncontrolled Hypertension among Elderly Hypertensive Patients in Southern China: A Community-Based, Cross-Sectional Survey."

BMC Public Health 14: 903. https://pubmed.ncbi.nlm.nih.gov/25178313.

Zulfitri, R., Agrina, A., Husnawati, H., (2022). "The Relationship between COVID-19 Prevention Measures and Quality of Life for the Elderly with Hypertension during the COVID-19 Pandemic." *Jurnal Keperawatan Soedirman*. http://jos.unsoed.ac.id/index.php/jks/article/view/7260.

Zulfitri, R., Sabrian, F. (2019). "Sociodemographic Characteristics and Psychosocial Wellbeing of Elderly with Chronic Illnesses Who Live with Family at Home." *Enfermeria Clinica* 29: 34–37. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85061286869&doi=10.1016%2Fj.enfcli.2018.11.014&partnerID=40&md5=3596e97484ff2686de542194ffc9d03e.