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THE EFFECTIVENESS OF SUPPORTIVE THERAPY ON PSYCHOLOGICAL DISTRESS AND BLOOD PRESSURE IN PATIENTS WITH HYPERTENSION: A SYSTEMATIC REVIEW

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ABSTRACT

Background: Hypertension is one of the diseases that is currently starting to be suffered by many adults, this shows that hypertension is one of the chronic diseases that requires more attention. This study aims to determine the effectiveness of supportive therapy on psychological distress and hypertension, **Methods:** This systematic review searches for relevant articles using keywords based on MeSH in the Scopus, PubMed, Proquest, and Google Scholar databases. The study guidelines used are PRISMA. Literature searches were conducted on studies from 2018 to 2023, in Indonesian and English. The keywords used in the article search are: ("supportive therapy OR psychotherapy") AND ("psychological distress OR anxiety OR stress OR depression") AND ("blood pressure OR hypertension"). The analysis used is the narrative method. Ten articles were included in the final insight, **Results:** The results of the study showed that the results of the article review stated that the average article was a cross-sectional study. The number of respondents used in the study ranged from 72 to 530 respondents. hypertension sufferers who were given supportive group therapy experienced a significant decrease in blood pressure, thus having a positive impact on hypertension sufferers, **Conclusions:** this systematic review shows that the entire literature states that supportive therapy has a good effect on psychological distress and hypertension.

Keywords: Blood pressure, Hypertension, Psychological distress, Supportive therapy.

Introduction

Individuals with hypertension may experience psychological distress as a result of their condition, which can include anxiety, depression, and stress. Psychological distress refers to a negative state of stress characterized by feelings associated with depression and anxiety, which can significantly impact both physical and mental health (Azzahra, 2017). Psychological distress in individuals with hypertension necessitates

adaptive coping strategies to help them sustain their overall well-being and quality of life (Yuziani & Maulina, 2018; Loke & Ching, 2022). In individuals with hypertension, psychological distress may manifest as excessive cognitive burden and emotional dysregulation, potentially worsening their overall health status (Pramudhanti & Mabururi, 2017). According to a survey conducted by the American Psychological Association, approximately 75% of adults reported experiencing moderate to high levels of



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stress (24% extreme, 51% moderate), and nearly half (42%) reported that their stress levels had increased over the past year (American Psychiatric Association, 2015).

Social support plays a significant role in alleviating stress. Greater levels of social support are associated with lower perceived stress among individuals with hypertension, whereas limited support is linked to higher stress levels (Oktaviani, 2021). Supportive therapy aims to enhance individual coping abilities, enabling them to adapt to changes in their environment and effectively utilize available support systems. It is a form of psychotherapy designed to help individuals strengthen their resilience, self-defense mechanisms, and utilize their internal and external resources. Peer support, particularly from individuals who maintain a positive perception of their illness, can reinforce and sustain a constructive outlook. The supportive therapy in this context will be conducted in four (4) sessions, which include: (1) Identifying issues related to anxiety, depression, and stress; exploring both internal and external support systems; assessing the individual's ability to access these supports and recognizing potential barriers. (2) Applying and practicing the use of internal support systems; monitoring outcomes and identifying obstacles encountered. (3) Applying and practicing the use of external support systems; monitoring outcomes and identifying obstacles encountered. (4) Evaluating the results and barriers in utilizing both internal and external support systems (Laela et al., 2018; Nasution et al., 2019).

Methods

This systematic review identified relevant articles using MeSH-based keywords

across databases such as Scopus, PubMed, ProQuest, and Google Scholar. The literature search was conducted following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. The search strategy included the following steps: 1) Using appropriate keywords and their synonyms relevant to the research topic, including ("supportive therapy OR psychotherapy") AND ("psychological distress OR anxiety OR stress OR depression") AND ("blood pressure OR hypertension"). Data collection was carried out in January 2024

Table 1. PICOT framework

| PICOT framework | Inclusion Criteria | Exclusion Criteria |
|------------------------|---|--|
| <i>Population</i> | Articles focusing on individuals with hypertension | - |
| <i>Intervention</i> | Studies involving supportive therapy | - |
| <i>Outcome</i> | Outcomes related to psychological distress and blood pressure | - |
| <i>Comparison</i> | Studies without a comparison | Studies without a comparison |
| <i>Time</i> | 2018 – 2023 | Studies that do not fall within the specified time frame |



| | | |
|---------------------|--|---|
| <i>Study Design</i> | <i>Cross sectional study, quasi-experimental study, a structural equation model, Mixed-methods study</i> | <i>Systematic review, literature review</i> |
| <i>Language</i> | Indonesia and English | - |

The articles retrieved from the databases were first screened for duplicates. Subsequently, the titles and abstracts were assessed for eligibility. The full texts of the selected articles that met the inclusion criteria were then reviewed for further evaluation. Relevant articles that fulfilled all inclusion criteria were included in the final systematic review. A major challenge encountered during the process was obtaining access to the full research data, as many studies were not yet published. A total of 299 articles were initially identified. Figure 1 illustrates the search results. In the end, ten articles were included in the final review.

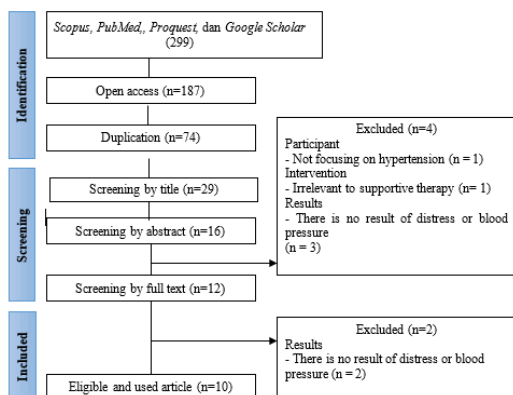


Figure 1. Literature Search Flowchart

Results

The results of the review on study characteristics indicate that the majority of the articles employed a cross-sectional study design. The number of respondents in the included studies ranged from 72 to 530 participants. The flowchart of the literature search process in this review is presented as follows:

| No. | Judul | Desain | Total Respondents |
|-----|--|---------------------------------------|-------------------|
| 1. | <i>Effect of Patient Support Groups for Hypertension on Blood Pressure among Patients with and Without Multimorbidity: Findings from a Cohort Study of Patients on a Home-Based Self-Management Program in Kenya (Otieno et al., 2023)</i> | <i>Quasi-experimental pilot study</i> | 410 |
| 2. | <i>Association among high blood pressure health literacy, social support and health-related quality of life among a community population with hypertension: a community-based cross-sectional study in China (Wang et al., 2022)</i> | <i>Cross-sectional study</i> | 406 |
| 3. | <i>Depression and anxiety among people with hypertension on follow-up in Eastern Ethiopia: A multi-center cross-sectional study (Abdisa et al., 2022)</i> | <i>Cross-sectional study</i> | 471 |
| 4. | <i>The Relationship Of Depression-Anxiety Inspection and Hypertension in Newly Diagnosed Young Hypertensive Patients (Kuzeytemiz & Biçer Kanat, 2022)</i> | <i>Cross-sectional study</i> | 300 |
| 5. | <i>The effect of high blood pressure-health literacy, self-management behavior, self-efficacy and social support on the health-related quality of life of Kazakh hypertension patients in a low-income rural area of China: a structural equation model (Zhang et al., 2021)</i> | <i>Structural Equation Model</i> | 516 |
| 6. | <i>Depression, anxiety and psychological distress in patients with pulmonary hypertension: a mixed-methods study (Takita et al., 2021)</i> | <i>Mixed-methods study</i> | 100 |
| 7. | <i>Hubungan Dukungan Sosial Keluarga Dengan Stres Dalam Hipertensi (Oktaviani, 2021)</i> | <i>Cross-sectional study</i> | 72 |
| 8. | <i>Family, Social, and Health Worker Support of Compliance Behaviour to Patients with Hypertension In Bogor, Indonesia (Maytassari & Sartika, 2020)</i> | <i>Cross-sectional study</i> | 110 |
| 9. | <i>A Predictive Model of the Effects of Depression, Anxiety, Stress, 6-Minute-Walk Distance, and Social Support on Health-Related Quality of Life in an Adult Pulmonary Hypertension Population (Tartavouille, 2015)</i> | <i>Cross-sectional study</i> | 166 |
| 10. | <i>The association between perceived stress and hypertension among Asian Americans: does social support and social network make a difference? (Lu et al., 2015)</i> | <i>Cross-sectional study</i> | 530 |

Ten articles related to the selected topic were found. The articles covered peer support groups, hypertension, and distress. There was a limited number of articles discussing all three. Peer support groups are rarely used for clients with psychosocial problems and physical



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illnesses. This therapy is still widely used for clients with mental disorders.

Discussion

Based on the literature, it was found that individuals with hypertension who received supportive group therapy experienced a significant reduction in blood pressure, resulting in a positive impact on their overall condition (Otieno et al., 2023). The higher the level of social support, the lower the stress experienced by individuals with hypertension; conversely, the lower the perceived social support, the higher the level of stress they tend to experience (Oktaviani, 2021). Some studies have shown a strong link between stress and blood pressure, as well as the risk of heart disease. The more stressed a person is, the higher their blood pressure tends to be (Dar et al., 2019). Among young people with hypertension, it is commonly observed that hypertension often coexists with symptoms of depression and anxiety (Kuzeytemiz & Biçer Kanat, 2022). As a result, the stress experienced by people with hypertension is likely to influence their blood pressure..

Based on Loke & Ching (2022), A quarter of individuals with hypertension experience psychological distress in the form of symptoms such as depression, anxiety, or stress. The highest prevalence was psychological distress (28.8%), followed by anxiety (21.3%), depression (16.2%), and stress symptoms (13.9%). Anxiety and depression are commonly found among people with hypertension (Shah et al., 2022). Analysis findings show that, on average, individuals with prehypertension experience greater psychological distress compared to those without hypertension (Al-Zahrani et al., 2021). Individuals with hypertension tend to have higher levels of depression and anxiety compared to the general population (Takita et

al., 2021). Research of Eghbali et al., (2022), This shows that individuals in the therapy group experienced lower levels of psychological distress, highlighting the importance of psychological interventions as a more effective approach to controlling hypertension.

Social support influences the physical and psychological well-being of individuals with hypertension by reducing stress and promoting health-related behaviors (Wang et al., 2022). According to Abdisa et al., (2022), female gender, the presence of comorbid medical conditions, and low levels of social support were statistically linked to increased symptoms of depression and anxiety. Meanwhile, a study by Zhang et al., (2021), showed that blood pressure had the strongest correlation with sleep quality, followed by self-management behavior, social support, and self-efficacy. However, social support was found to have a direct beneficial effect on hypertension, regardless of whether the individual was experiencing stress (Lu et al., 2015).

The limitations of support group therapy are still widely used for clients with mental illness. The article discussed in this article focuses on the psychosocial correlation between hypertension and hypertension, leading the author to assume that peer support groups have the potential to address mental health issues caused by physical illness.

Conclusion

The conclusion of this systematic review indicates that all included studies consistently reported that supportive therapy has a positive effect on psychological distress and hypertension. Supportive therapy may serve as a



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beneficial intervention to improve the condition of individuals with hypertension.

References

- Abdisa, L., Letta, S., & Nigussie, K. (2022). Depression and anxiety among people with hypertension on follow-up in Eastern Ethiopia: A multi-center cross-sectional study. *Frontiers in Psychiatry*, 13(November), 1–10. <https://doi.org/10.3389/fpsy.2022.853551>
- Al-Zahrani, J., Shubair, M. M., Aldossari, K. K., Al-Ghamdi, S., Alroba, R., Alsuraimi, A. K., Angawi, K., & El-Metwally, A. (2021). Association between prehypertension and psychological distress among adults in Saudi Arabia: A population-based survey. *Saudi Journal of Biological Sciences*, 28(10), 5657–5661. <https://doi.org/10.1016/j.sjbs.2021.06.014>
- American Psychiatric Association. (2015). *Diagnosis and statistical manual of mental disorder Understanding mental distress.pdf*. 4–6.
- Azzahra, F. (2017). *Pengaruh Resiliensi Terhadap Distres Psikologis Pada Mahasiswa*. 05(01), 1–14.
- Dar, T., Radfar, A., Abohashem, S., Pitman, R. K., Tawakol, A., & Osborne, M. T. (2019). Psychosocial Stress and Cardiovascular Disease. *Current Treatment Options in Cardiovascular Medicine*, 21(5). <https://doi.org/10.1007/s11936-019-0724-5>
- Eghbali, M., Akbari, M., Seify, K., Fakhrolmoberi, M., Heidarpour, M., Roohafza, H., Afzali, M., Mostafavi-Esfahani, F. S., Karimian, P., Sepehr, A., Shafie, D., & Khosravi, A. (2022). Evaluation of Psychological Distress, Self-Care, and Medication Adherence in Association with Hypertension Control. *International Journal of Hypertension*, 2022. <https://doi.org/10.1155/2022/7802792>
- Harmayetty, Widyawati, I. Y., & Sari, A. P. (2008). Musik Tembang Kenangan Menurunkan Depresi Pasien Stroke (Memory Songs Decrease Depression for Stroke Patients). *Jurnal Ners*, Vol.3 No.1(031), 34–36.
- Kuzeytemiz, M., & Biçer Kanat, B. (2022). The Relationship Of Depression-Anxiety Inspection And Hypertension In Newly Diagnosed Young Hypertensive Patients. *Turkish Journal of Clinics and Laboratory*, 13(2), 176–181. <https://doi.org/10.18663/tjcl.873503>
- Laela, S., Anna Keliat, B., & Mustikasari. (2018). Thought stopping and supportive therapy can reduce postpartum blues and anxiety parents of premature babies. *Enfermeria Clinica*, 28(September), 126–129. [https://doi.org/10.1016/S1130-8621\(18\)30051-2](https://doi.org/10.1016/S1130-8621(18)30051-2)
- Loke, W. H., & Ching, S. M. (2022). Prevalence and factors associated with psychological distress among adult patients with hypertension in a primary care clinic: A cross-sectional study. *Malaysian Family Physician*, 17(2), 89–98. <https://doi.org/10.51866/oa.131>
- Lu, X., Juon, H.-S., He, X., Dallal, C. M., Wang, M. Q., & Lee, S. (2015). The



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- association between perceived stress and hypertension among Asian Americans: does social support and social network make a difference? *Cancer Cell*, 2(1), 1–17.
<https://doi.org/10.1007/s10900-018-00612-7>.The
- Madhumitha, M. (2014). Influence of Stress and Socio-demographic Factors on Hypertension among Urban Adults in North Karnataka. *Asian Journal of Biomedical and Pharmaceutical Sciences*, 4(38), 23–26.
<https://doi.org/10.15272/ajbps.v4i38.630>
- Nasution, R. A., Susanti, H., & Wardani, I. Y. (2019). *Pemberian psikoedukasi keluarga dan terapi suportif berbasis kebutuhan keluarga dalam merawat klien dengan halusinasi*.
- Oktaviani, R. H. (2021). *Hubungan Dukungan Sosial Keluarga Dengan Stres Dalam Hipertensi*.
- Otieno, P., Agyemang, C., Wilunda, C., Sanya, R. E., Iddi, S., Wami, W., Van Anandel, J., van der Kloet, B., Teerling, J., Siteyi, A., & Asiki, G. (2023). Effect of Patient Support Groups for Hypertension on Blood Pressure among Patients with and Without Multimorbidity: Findings from a Cohort Study of Patients on a Home-Based Self-Management Program in Kenya. *Global Heart*, 18(1), 28.
<https://doi.org/10.5334/gh.1208>
- Pramudhanti, H., & Mabruhi, M. I. (2017). *Efektivitas Meditasi Transendental untuk Menurunkan Stres Pada Penderita Hipertensi*. 1–13.
- Shah, S., Adhikari, S., Aryal, S., Adhikari, T. B., Sah, S. K., Paudel, B. S., & Pradhan, P. M. S. (2022). Anxiety and Depression among Hypertensive Adults in Tertiary Care Hospitals of Nepal. *Psychiatry Journal*, 2022, 1–9.
<https://doi.org/10.1155/2022/1098625>
- Takita, Y., Takeda, Y., Fujisawa, D., Kataoka, M., Kawakami, T., & Doorenbos, A. Z. (2021). Depression, anxiety and psychological distress in patients with pulmonary hypertension: A mixed-methods study. *BMJ Open Respiratory Research*, 8(1).
<https://doi.org/10.1136/bmjresp-2021-000876>
- Wang, Y., Chen, T., Gan, W., Yin, J., Song, L., Qi, H., & Zhang, Q. (2022). Association among high blood pressure health literacy, social support and health-related quality of life among a community population with hypertension: a community-based cross-sectional study in China. *BMJ Open*, 12(6), 1–8.
<https://doi.org/10.1136/bmjopen-2021-057495>
- Yuziani, & Maulina, M. (2018). The correlation between stress level and degree of depression in the elderly at a nursing home in lhokseumawe in the year 2017. *Emerald Reach Proceedings Series*, 1, 497–502.
<https://doi.org/10.1108/978-1-78756-793-1-00044>
- Zhang, Q., Huang, F., Zhang, L., Li, S., & Zhang, J. (2021). The effect of high blood pressure-health literacy, self-management behavior, self-efficacy and social support on the health-related quality of life of Kazakh hypertension patients in a



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low-income rural area of China: a
structural equation model. *BMC
Public Health*, 21(1), 1–10.
<https://doi.org/10.1186/s12889-021-1129-5>