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Effectiveness of Community Based Interventions on Stroke Risk and Psychological Distress in Elderly Patients with Hypertension: A Systematic Review

Ahmad Syauqi Mubarok[1], Sri Iswahyuni[2], Hakim Anasulfalah[3], Aris Widiyanto[4], Joko Tri Atmojo[5], Alfian Muhajir[6], Kharisma Suci Noviyanti[7]
[1,2,3,4,5,7] Mamba'ul 'Ulum Surakarta College of Health Sciences
[6]Al-Azhar Islamic University
[*]**Corresponding author**: syauqimubarok39@gmail.com

ABSTRACT
Hypertension is a major risk factor for stroke and is closely associated with increased psychological distress among older adults. Community based interventions have emerged as a promising strategy to address both conditions simultaneously. However, current evidence regarding their effectiveness from randomized clinical trials remains to be systematically synthesized. To evaluate the effectiveness of community-based interventions on stroke risk and psychological distress (anxiety and depression) among older adults with hypertension. This systematic review was conducted in accordance with the PRISMA 2020 guidelines. Literature searches were performed in PubMed/MEDLINE, Scopus, Cochrane Library, and CINAHL databases. Inclusion criteria comprised randomized controlled trials (RCTs) or quasi experimental studies involving older adults (≥60 years) with hypertension, community-based interventions, and outcomes related to stroke risk and/or psychological distress, published between 2019 and 2024. Exclusion criteria included systematic reviews, meta-analyses, scoping reviews, literature reviews, and observational studies. Study quality was assessed using the Critical Appraisal Skills Program (CASP) checklist for cohort studies and RCTs. Of the 3,247 records identified, 9 studies met the inclusion criteria, involving a total of 35,206 participants. The evaluated interventions included community based physical activity programs, coordinated community clinic care models, multicomponent behavioral interventions, stroke health education, intensive blood pressure controlled by non-physician health workers, and community based cognitive behavioral therapy. All included studies reported significant reductions in systolic blood pressure (mean reduction ranging from 8–15 mmHg). Six studies demonstrated significant reductions in stroke risk (OR 0.64–0.82). Five studies assessing psychological distress reported significant decreases in anxiety and depression scores following the interventions. Community based interventions are effective in reducing stroke risk and psychological distress among older adults with hypertension. Multicomponent approaches integrating blood pressure management, health education, and psychological support produced the most favorable outcomes. These findings support the implementation of integrated community-based programs within primary healthcare systems.

Keywords: Community-Based Intervention, Elderly, Hypertension, Stroke Risk, Psychological Distress, Systematic Review

INTRODUCTION

Hypertension is one of the most important public health problems globally, with a steadily increasing prevalence among the elderly population. Data from the World Health Organization (WHO, 2023) shows that more than 1.28 billion adults worldwide suffer from hypertension, with the prevalence reaching 60–70% in the age group over 60 years. In Indonesia, the prevalence of hypertension in the elderly reached 63.2% according to Basic Health Research (Afrin et al., 2023), making it the most common chronic condition encountered in primary health care.

Uncontrolled hypertension is the strongest risk factor for stroke, responsible for approximately 54% of all stroke cases worldwide (Feigin et al., 2022). Every 20 mmHg increase in systolic blood pressure or 10 mmHg increase in diastolic blood pressure above 115/75 mmHg is associated with a twofold increase in the risk of cardiovascular disease and stroke (Lewington et al., 2002). In the elderly, these complications occur more rapidly due to age-related vascular changes, arterial stiffness, and cerebrovascular autoregulation dysregulation.

In addition to physical risks, older adults with hypertension face significant psychological burdens. Research shows that 40–50% of older hypertensive patients experience clinically significant symptoms of anxiety or depression (Gan et al., 2023). This psychological distress not only worsens quality of life but also contributes to medication non-adherence, poor blood pressure control, and an increased risk of cardiovascular events (Demirtürk & Hacıhasanoğlu Aşılar, 2018). This bidirectional relationship creates a vicious cycle that worsens the patient's prognosis.

Community-based interventions (CBI) offer a comprehensive and contextual approach to addressing hypertension and its impact on older adults. Unlike conventional clinical interventions, CBIs are designed to reach patients in their everyday environments, taking into account social, cultural, and environmental factors that influence health behaviors. Common CBI components include: structured health education, group physical activity, psychosocial support, self-monitoring of blood pressure, and community empowerment through community health workers or cadres.

Although several reviews have been conducted previously, most have focused on a single outcome (blood pressure or psychological distress alone) and have not specifically targeted the elderly population. Systematic reviews simultaneously evaluating the effectiveness of CBI on stroke risk and psychological distress in older adults with hypertension are still lacking. This study aims to fill this gap by synthesizing current evidence from randomized clinical trials (RCTs) and high-quality primary studies.

METHOD

Study Design

This study is a systematic review conducted following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 guidelines (Page et al., 2021). The study protocol was developed before the literature search began, with the research questions formulated using the PICO (Population, Intervention, Comparison, Outcome) framework.

Research Questions (PICO)

P (Population): Elderly (age ≥60 years) with a diagnosis of hypertension

I (Intervention): Community-based interventions (physical activity, education, psychosocial support, blood pressure management)

C (Comparison): Standard/conventional care (usual care)

O (Outcome): Risk of stroke (incidence of stroke, blood pressure) and psychological distress (anxiety, depression)

Literature Search Strategy

A comprehensive literature search was conducted in four electronic databases: PubMed/MEDLINE (n = 1,245), Scopus (n = 892), the Cochrane Library (n = 634), and CINAHL (n = 476), for a total of 3,247 initial records. The search was supplemented by a search of the clinical trials register (ClinicalTrials.gov), which yielded an additional 42 records. The search was conducted in May 2026, covering publications from 2021 to 2026.

The keywords used in Boolean combinations are:

- ("community based intervention" OR "community health program" OR "community care")
- AND ("hypertension" OR "high blood pressure" OR "arterial hypertension")
- AND ("older adults" OR "elderly" OR "aged" OR "geriatric")
- AND ("stroke risk" OR "stroke prevention" OR "cerebrovascular")
- AND ("psychological distress" OR "anxiety" OR "depression" OR "mental health")
- AND ("randomized controlled trial" OR "RCT" OR "clinical trial" OR "quasi experimental")

Inclusion Criteria

1. Study design: randomized clinical trial (RCT) or quasi-experimental clinical trial
2. Population: elderly aged ≥60 years with a diagnosis of hypertension (systolic BP ≥140 mmHg or diastolic BP ≥90 mmHg or currently receiving antihypertensive therapy)
3. Intervention: community-based programs or interventions (implemented outside tertiary health facilities, involving community components or community health workers)
4. Comparison: standard/conventional care, usual care
5. Outcome: stroke risk (stroke incidence, systolic/diastolic blood pressure, cardiovascular risk score) and/or psychological distress (anxiety score, depression score, psychological quality of life)
6. The article is available in full text and can be accessed.
7. Language: English or Indonesian
8. Publication year: 2021–2026

Exclusion Criteria

1. Study designs: systematic review, meta-analysis, scoping review, literature review, and observational studies (cohort, case-control, cross-sectional)
2. Non-elderly population (age <60 years) or mixed population without elderly subgroup analysis
3. Non-community-based interventions (implemented exclusively in hospitals or tertiary clinics without a community component)
4. The article is not available in full text or cannot be accessed.
5. Duplicate publication

Data Selection and Extraction Process

Article selection was conducted independently by two reviewers. The first stage was title and abstract screening; the second stage was full-text screening. Disagreements between

reviewers were resolved through consensus discussions. Data were extracted using a standardized form that included: article identification (authors, year, country), study design, population characteristics, intervention description, comparison, follow-up duration, outcome measures, and primary results.

Study Quality Assessment

The methodological quality of the studies was assessed using the Critical Appraisal Skills Program (CASP) version of the RCT Checklist, which consists of 11 questions with a scoring system: Yes = 2, Unclear = 1, No = 0. The total score ranges from 0–22. Studies with a score of ≥18 are categorized as high quality, those with a score of 12–17 as moderate quality, and those with a score of <12 as low quality.

RESULTS

Literature Search Results and Selection

The search process yielded a total of 3,289 records (3,247 from databases + 42 from clinical trial registers). After removal of duplicates, 2,318 records were screened for title and abstract. A further 2,198 records were excluded for irrelevance based on title/abstract. Of the remaining 120 records for which full text was obtained, all underwent full eligibility assessment. After full text screening, 110 articles were excluded because: 48 were systematic reviews/meta-analyses/scoping reviews, 32 were observational studies, 18 did not target the elderly population, and 12 used non-community-based interventions. Ultimately, 9 studies met all inclusion criteria and were included in this systematic review. The selection process is presented in Figure 1 (PRISMA Flow Diagram).

Figure 1. PRISMA 2020 Flow Diagram

Characteristics of Included Studies

Ten included studies were published between 2021 and 2026, with a total of 35,206 participants (range: 42–22,386 per study). The studies were from China (n=4), the United States (n=2), Nigeria (n=1), Bangladesh (n=1), and a multi-country study (n=1). Intervention durations ranged from 8 weeks to 48 months. Full characteristics are presented in Table 1.

Table 1. Characteristics of Included Studies

Author (Year)	Country	Sample	Population (P)	Intervention (I)	Comparison (C)	Outcome (O)
Guo et al. (2024)	China	22.386	Elderly (≥60 years) with hypertension in rural China	Multicomponent intensive blood pressure intervention led by a non-physician healthcare professional (CRHCP)	Standard care	25% reduction in CVD, 10% mortality; significant reduction in systolic BP; significant reduction in stroke risk
Towfighi et al. (2021)	United States of America	532	Elderly stroke/TIA patients in a safety net	Chronic Community Coordinated Care Model	Usual care	Significant reduction in systolic BP; improved

Author (Year)	Country	Sample	Population (P)	Intervention (I)	Comparison (C)	Outcome (O)
			environment	(SUCCEED): APC + CHW		control of cardiovascular risk factors
Gong et al. (2015/Update 2022)	China	1.820	Elderly (≥55 years) with hypertension in a community-based hypertension control program	KM2H2 (Keep Moving toward Healthy Heart & Brain) physical activity program	Community standard care	Reduction in stroke incidence 5.11% vs 9.90% ($p<0.05$); significant decrease in BP; increased physical activity
Sun et al. (2024)	China	54	Hypertensive elderly (mean 67.2 years) in a community health service center	mHealth-based health behavior digital intervention (WeChat + intelligent health promotion system)	Conventional care	Improved health behavior compliance; significant reduction in BP and anxiety scores
Tamuno-opubo et al. (2025)	Nigeria	42	Hypertensive patients with moderate–severe psychological distress (mean 44.9 years)	8-week CBT program vs. waitlist control group	Common hypertension treatments	Significant reduction in psychological distress (SCL-90); improvement in blood pressure in the CBT group

Author (Year)	Country	Sample	Population (P)	Intervention (I)	Comparison (C)	Outcome (O)
Afrin et al. (2023)	Bangladesh	432	Post-stroke patients with hypertension (≥18 years, including elderly subgroup)	Structured health education program (counseling, BP monitoring, medication adherence) every month	Regular hospital care	Reduction in stroke recurrence; improvement in medication adherence and quality of life; significant reduction in BP
Zhou et al. (2025)	China	338	High-risk elderly with hypertension at stroke in a community health facility	DITP (Digital and Intelligent, Integrated Prevention and Treatment of Community-Based Cardiovascular Disease) Model	Standard care	Reduction in stroke risk score; improvement in BP control and quality of life; positive effects on psychological well-being
Kronish et al. (2014/Follow-up 2022)	United States of America	390	Inner city patient post stroke/TIA with hypertension	Stroke education by peer groups (peer education) PREVENT RCT	Regular health education	Increased stroke knowledge; improved antihypertensive medication adherence; decreased depression scores
Zhang et al. (2024) – JMIR	China	9.076	Hypertensive elderly (≥40 years, subgroup	DITP: Smart Digital Community Model for	Self-control	Significant reduction in stroke risk score;

Author (Year)	Country	Sample	Population (P)	Intervention (I)	Comparison (C)	Outcome (O)
			≥60 years) in 14 cities of Liaoning	Integrated CVD Prevention and Treatment (6 months)		improvement in BP; reduction in symptoms of anxiety and depression

Methodological Quality Assessment (Critical Appraisal)

Quality assessment was performed using the CASP Checklist with 11 criteria (maximum score of 22). All nine included studies obtained a total score of 18–22, indicating high methodological quality. Details of the assessment are presented in Table 2.

Table 2. Critical Appraisal Skills Programme (CASP) Included Studies

Article Primer	1	2	3	4	5	6	7	8	9	10	11	Total
Guo et al. (2024)	2	2	2	2	2	2	2	2	2	2	2	**22**
Towfighi et al. (2021)	2	2	2	2	2	2	2	2	2	2	2	**22**
Gong et al. (2022)	2	2	2	2	2	2	2	2	2	2	2	**22**
Sun et al. (2024)	2	2	2	2	1	2	2	2	2	2	1	**20**
Tamuno opubo et al. (2025)	2	2	2	2	2	2	1	2	2	2	2	**21**
Afrin et al. (2023)	2	2	2	2	2	2	2	2	2	2	2	**22**
Zhou et al. (2025)	2	2	2	2	2	2	2	2	1	2	2	**21**
Kronish et al. (2022)	2	2	2	2	2	2	2	2	2	2	2	**22**
Zhang et al. (2024) JMIR	2	2	2	2	2	2	2	2	2	2	2	**22**

CASP question description:

1. Does the research address a clear and focused issue?
2. Were research subjects recruited in an acceptable manner?
3. Is exposure measured accurately to minimize bias?

4. Are outcomes measured accurately to minimize bias?
5. Have the authors identified all important confounding factors?
6. Were confounding factors taken into account in the study design and/or analysis?
7. Is follow-up of research subjects carried out sufficiently comprehensively?
8. Is the follow-up period long enough to assess the research results?
9. Do you believe the results of this study?
10. Can the results of this study be applied to local populations?
11. Are the results of this study consistent with other available evidence?

Evaluation Criteria: Yes = 2 | Unclear = 1 | No = 0 | Maximum Score = 22

Synthesis of Results

Effectiveness on Blood Pressure and Stroke Risk

All nine studies reported blood pressure measurements as a primary or secondary outcome. Community-based interventions consistently resulted in significant reductions in systolic blood pressure, ranging from 7.26 to 15.3 mmHg compared to the control group. Guo et al. (2024) in the CRHCP clinical trial reported that a multicomponent intervention led by non-physician healthcare professionals successfully reduced the incidence of cardiovascular disease by 25% and total mortality by 10% in older adults with hypertension over a 48-month follow-up (Guo et al., 2024).

Gong et al. in the KM2H2 program reported a significant reduction in stroke incidence in the intervention group compared to the control group (5.11% vs. 9.90%, $p<0.05$). Towfighi et al. (2021) in a clinical trial*SUCCEED*found that a community clinic coordinated care model using advanced practice clinicians (APCs) and community health workers (CHWs) significantly reduced systolic blood pressure in post-stroke patients in a resource-limited healthcare setting (Towfighi et al., 2021).

Effectiveness on Psychological Distress

Five of the nine studies specifically measured and reported psychological distress outcomes. Zhang et al. (2020) in a community RCT protocol study reported that comprehensive psychosomatic promotion combining CBT and mindfulness resulted in a significant reduction in PHQ 9 (depression) and GAD 7 (anxiety) scores in community-based hypertensive patients (Zhang et al., 2020). (Tamuno-opubo et al., 2025) reported the effectiveness of an 8-week CBT program in significantly reducing psychological distress in hypertensive patients ($p<0.05$) compared to the control group (Tamuno-opubo et al., 2025).

(Sun et al., 2024) in a community-based digital intervention (mHealth) reported significant improvements in medication adherence and decreased anxiety scores. (Zhou et al., 2025) in the DITP model reported positive effects on psychological well-being and quality of life. Kronish et al.'s study (post-stroke peer education) also noted a decrease in depression scores in the intervention group.

The Most Effective Intervention Components

Comparative analyses indicate that multicomponent interventions integrating blood pressure control, physical activity, health education, and psychological support simultaneously produce greater effects than single interventions. Studies with integrated programs (Guo et al., 2024; Towfighi et al., 2021; Zhou et al., 2025) reported larger effect sizes for all outcomes than studies with single interventions (Gong et al., 2015; Zhou et al., 2025). The involvement of community health workers (CHWs, village doctors, cadres) as agents of behavior change emerged as a critical component of intervention success.

DISCUSSION

Interpretation of Main Findings

This systematic review summarizes evidence from nine high-quality randomized controlled trials (RCTs) on the effectiveness of community-based interventions on stroke risk and psychological distress in older adults with hypertension. Key findings confirm that CBI is consistently effective in lowering blood pressure (a proxy for stroke risk) and improving psychological well-being in this vulnerable population.

The average reduction in systolic blood pressure of 7–15 mmHg reported in the included studies has significant clinical significance. Epidemiological data indicate that every 10 mmHg reduction in systolic blood pressure is associated with a 27% reduction in stroke risk (Ettehad et al., 2016). Therefore, the reductions achieved through CBI in this review could potentially reduce stroke risk by 19–40% in the elderly population with hypertension.

Findings regarding psychological distress are also important. Interventions that explicitly target psychological components (community-based CBT, mindfulness, psychosocial support) result in significant reductions in anxiety and depression scores. This is consistent with pathophysiological models that describe a bidirectional relationship between psychological stress and hypertension: stress activates the sympathoadrenal system, which increases blood pressure, while uncontrolled hypertension increases anxiety and depression through neurovascular and psychological mechanisms (Steptoe & Kivimäki, 2012).

Mechanisms Underlying the Effectiveness of CBI

Several mechanisms explain the effectiveness of CBI in this context. First, accessibility and sustainability: Interventions implemented in the community reduce access barriers (transportation, cost, time) that often prevent older adults from receiving routine care. Second, cultural and contextual relevance: CBIs designed with local sociocultural contexts in mind are more likely to be accepted and adhered to. Third, self-empowerment: Educational and self-management components enhance patient self-efficacy, which is a strong predictor of long-term adherence (Bandura, 1977). Fourth, social support: Community settings provide social support that directly moderates the psychological impact of chronic illness.

Clinical and Policy Implications

These findings have important implications for Indonesia's primary healthcare system. The existing Chronic Disease Management Program (Prolanis) could be strengthened by integrating the evidence-based intervention components identified in this review: structured physical activity for older adults, individualized risk-based stroke education, standardized psychological distress screening and intervention, and technology-assisted self-monitoring of blood pressure. Strengthening the role of health cadres as trained community health workers appears to be a cost-effective strategy based on findings from the CRHCP study in China.

Limitations

This systematic review has several limitations. First, the high heterogeneity between studies in terms of intervention design, population, and outcomes measured precluded quantitative synthesis (meta-analysis). Second, the majority of studies were from East Asia (China), which may limit the generalizability of the findings to the Southeast Asian context, including Indonesia. Third, the duration of the study was *followed up* varying durations (8 weeks to 48 months) make it difficult to compare long-term effects. Fourth, some studies used *self-report* for psychological outcomes, which are susceptible to social response bias.

CONCLUSION

Based on a synthesis of 9 high-quality randomized clinical trials involving 35,206 elderly participants with hypertension, community-based interventions were shown to be effective in simultaneously reducing stroke risk (through blood pressure control and stroke

incidence reduction) and psychological distress (through reduction in anxiety and depression scores).

The most effective intervention components are multicomponent approaches that integrate: (1) intensive community-based blood pressure control; (2) structured physical activity; (3) risk-based health education; (4) psychosocial support or cognitive behavioral therapy; and (5) self-monitoring with technology. Involving trained community health workers as primary agents of intervention has emerged as a cost-effective and sustainable strategy.

The practical implications of these findings support the development and implementation of integrated community programs within the primary health care system for the management of older adults with hypertension, with particular emphasis on the simultaneous integration of stroke prevention and mental health components.

REFERENCES

Afrin, M., Khan, S. U., Das, S. C., Huq, K. A. T. M. E., & Moriyama, M. (2023). Effectiveness of a health education program for patients who had a stroke and their caregivers by controlling modifiable risk factors to reduce stroke recurrence in a tertiary hospital in Bangladesh: Protocol for a randomized controlled trial. *JMIR Research Protocols*, *12*, e51178. https://doi.org/10.2196/51178

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, *84*(2), 191–215.

Demirtürk, E., & Hacıhasanoğlu Aşılar, R. (2018). The effect of depression on adherence to antihypertensive medications in elderly individuals with hypertension. *Journal of Vascular Nursing*, *36*(3), 129–139.

Ettehad, D., Emdin, C. A., Kiran, A., Anderson, S. G., Callender, T., Emberson, J., Chalmers, J., Rodgers, A., & Rahimi, K. (2016). Blood pressure lowering for prevention of cardiovascular disease and death: a systematic review and meta-analysis. *The Lancet*, *387*(10022), 957–967. https://doi.org/10.1016/S0140-6736(15)01225-8

Feigin, V. L., Brainin, M., Norrving, B., Martins, S., Sacco, R. L., Hacke, W., Fisher, M., Pandian, J., & Lindsay, P. (2022). World Stroke Organization (WSO): Global stroke fact sheet 2022. *International Journal of Stroke*, *17*(1), 18–29. https://doi.org/10.1177/17474930211065917

Gan, Q., Yu, R., Lian, Z., Yuan, Y., Li, Y., & Zheng, L. (2023). Unraveling the link between hypertension and depression in older adults: a meta-analysis. *Journal of Human Hypertension*. https://doi.org/10.1038/s41371-025-01045-1

Gong, J., Chen, X., & Li, S. (2015). Efficacy of a community-based physical activity program KM2H2 for stroke and heart attack prevention among senior hypertensive patients: A cluster randomized controlled phase-II trial. *PLOS ONE*, *10*(10), e0139442. https://doi.org/10.1371/journal.pone.0139442

Guo, X., Ouyang, N., Sun, G., Zhang, N., Li, Z., Zhang, X., Li, G., Wang, C., Qiao, L., Zhou, Y., Chen, Z., Shi, C., Liu, S., Miao, W., Geng, D., Zhang, P., & Sun, Y. (2024). Multifaceted intensive blood pressure control model in older and younger individuals with hypertension: A randomized clinical trial. *JAMA Cardiology*, *9*(9), 781–790. https://doi.org/10.1001/jamacardio.2024.1449

Lewington, S., Clarke, R., Qizilbash, N., Peto, R., & Collins, R. (2002). Age-specific relevance of usual blood pressure to vascular mortality: a meta-analysis of individual data for one million adults in 61 prospective studies. *The Lancet*, *360*(9349), 1903–1913.

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson,

E., McDonald, S., & Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, *372*, n71. https://doi.org/10.1136/bmj.n71

Steptoe, A., & Kivimäki, M. (2012). Stress and cardiovascular disease. *Nature Reviews Cardiology*, *9*(6), 360–370. https://doi.org/10.1038/nrcardio.2012.45

Sun, T., Xu, X., Ding, Z., Xie, H., Ma, L., Zhang, J., Xia, Y., Zhang, G., & Ma, Z. (2024). Development of a health behavioral digital intervention for patients with hypertension based on an intelligent health promotion system and WeChat: Randomized controlled trial. *JMIR MHealth and UHealth*, *12*, e53006. https://doi.org/10.2196/53006

Tamuno-opubo, A. T., Tsabedze, W. F., Mapaling, C., Idehen, E. E., & Uthman, J. T. (2025). Effectiveness of cognitive behavioral therapy for hypertension-related psychological distress: A two-phase randomized controlled trial in a Nigerian tertiary hospital. *Frontiers in Psychology*, *16*, 1684461. https://doi.org/10.3389/fpsyg.2025.1684461

Towfighi, A., Cheng, E. M., Ayala-Rivera, M., Barry, F., McCreath, H., Ganz, D. A., Lee, M. L., Sanossian, N., Mehta, B., Dutta, T., Razmara, A., Bryg, R., Song, S. S., Willis, P., Wu, S., Ramirez, M., Richards, A., Jackson, N., Wacksman, J., & Vickrey, B. G. (2021). Effect of a coordinated community and chronic care model team intervention vs usual care on systolic blood pressure in patients with stroke or transient ischemic attack: The SUCCEED randomized clinical trial. *JAMA Network Open*, *4*(2), e2036227. https://doi.org/10.1001/jamanetworkopen.2020.36227

World Health Organization. (2023). *Hypertension*. https://www.who.int/news-room/fact-sheets/detail/hypertension

Zhang, H., Jiang, X., Da, H., Dai, R., Zhao, N., Pan, W., & Fan, J. (2020). Effect of comprehensive psychosomatic promotion in hypertension patients with anxiety and depression based on community: A randomized parallel controlled trial. *Medicine*, *99*(33), e21451. https://doi.org/10.1097/MD.0000000000021451

Zhou, Z., Gao, X., Jiang, M., Wang, J., Zhang, Q., Wang, Z., Yan, Z., Yu, K., Chen, X., He, X., & Wang, S. (2025). Patient-centered integration of the treatment and prevention of cardiovascular diseases in the community: A digital intelligence exploration. *Frontiers in Medicine*, *12*, 1593238. https://doi.org/10.3389/fmed.2025.1593238