



Holistic Assessment and Family-Centered Management of Hypertension in an Older Adult

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Article History

Received : 10 April 2026

Revised : 12 June 2026

Accepted : 23 October 2026

Available Online : 31 October 2026

Keywords:

hypertension;
family-centered care;
holistic assessment;
medication adherence;
primary healthcare.

To cite this article: Wandira, P. A., Rafie, R., IK, M., AW, H., Yuzaqi, M. I., Fachryah, N., & Afrilia, N. A. (2026). Holistic assessment and family-centered management of hypertension in an older adult. *Biomedical Research and Theory Letters*, 2(2), 40–47.

<https://doi.org/10.58524/brtl.v2i2.188>

Abstract

Hypertension is a major contributor to cardiovascular and renal morbidity, particularly among older adults. Effective long-term management requires not only pharmacological treatment but also lifestyle modification, medication adherence, and family involvement. A holistic, family-centered approach may help identify individual barriers to disease management and support patient-centered care. This case report describes the clinical assessment and family-oriented management of hypertension in an older adult attending a primary healthcare facility in Bandar Lampung, Indonesia. An 82-year-old male with hypertension diagnosed in 2010 and a reported history of declining kidney function since 2020 underwent a family medicine assessment at a primary healthcare facility in Bandar Lampung. Clinical examination documented a blood pressure of 118/79 mmHg, heart rate of 80 beats/min, respiratory rate of 20 breaths/min, and body temperature of 36.6°C. The patient reported regular antihypertensive medication use and routine healthcare attendance. Lifestyle assessment identified frequent consumption of high-salt and high-fat foods, inadequate fruit and vegetable intake, and insufficient physical activity. Family functioning was evaluated using the Family APGAR instrument, yielding a score of 10, indicating highly functional family relationships. A SCREEM assessment identified generally supportive family and socioeconomic circumstances. A family-centered intervention was implemented through patient education, counseling on dietary sodium reduction, recommendations for regular physical activity, medication adherence reinforcement, and family involvement in long-term hypertension management. Counseling incorporated behavioral change principles based on the 5A–5R framework, with particular emphasis on recognizing lifestyle barriers, strengthening motivation, and encouraging regular blood pressure monitoring. The patient's spouse was involved in supporting dietary modifications, treatment adherence, and routine healthcare follow-up. The documented blood pressure was within a controlled range at the reported assessment. The patient demonstrated favorable family support and reported regular medication adherence. However, the available case documentation did not provide serial blood pressure measurements or standardized pre- and post-intervention assessments to establish the effectiveness of the counseling intervention. This case illustrates the application of holistic family medicine assessment in identifying lifestyle-related challenges and supporting the long-term management of hypertension in an older adult. Family functioning assessments and individualized counseling may provide useful information for patient-centered care. Nevertheless, structured follow-up and objective outcome measurements are necessary to determine the impact of family-centered interventions on sustained blood pressure control.



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1. Introduction

Hypertension is one of the leading modifiable risk factors for cardiovascular disease, stroke, chronic kidney disease, and premature mortality worldwide. Despite the availability of effective pharmacological and non-pharmacological interventions, achieving and maintaining optimal blood pressure control remains a major public health challenge. According to the World Health Organization (WHO, 2025), approximately 1.4 billion adults aged 30–79 years were living with hypertension worldwide in 2024, representing approximately one-third of this population. However, only about 23% of individuals with hypertension had their blood pressure adequately controlled. This substantial burden highlights persistent challenges related to early detection, continuity of care, medication adherence, lifestyle modification, and access to appropriate healthcare services. The 2024 European Society of Cardiology (ESC) guidelines emphasize that effective hypertension management requires

individualized cardiovascular risk assessment, evidence-based pharmacological treatment, lifestyle interventions, and regular blood pressure monitoring (McEvoy et al., 2024).

The management of hypertension becomes increasingly complex in older adults because of age-related physiological changes, multimorbidity, polypharmacy, and differences in functional capacity. Long-standing hypertension can contribute to cardiovascular and renal complications, while existing comorbidities may influence medication selection, therapeutic targets, and monitoring requirements. Accordingly, blood pressure management in older patients should consider not only numerical treatment targets but also medication tolerance, frailty, orthostatic symptoms, kidney function, and individual preferences. McEvoy et al. (2024) emphasized the importance of individualized blood pressure targets, particularly in patients with frailty, limited life expectancy, or clinically significant comorbidities. Furthermore, the Kidney Disease: Improving Global Outcomes (KDIGO, 2024) guidelines highlight the importance of evaluating renal function and albuminuria in patients with chronic kidney disease. These considerations are particularly relevant when managing older adults with a history of hypertension and suspected renal impairment, as long-term treatment requires balancing cardiovascular protection with medication safety and preservation of kidney function.

Successful hypertension control depends on more than the prescription of antihypertensive medication. Dietary sodium intake, physical activity, weight management, medication adherence, and regular clinical follow-up contribute to long-term cardiovascular risk reduction. However, maintaining recommended health behaviors can be challenging because of established habits, limited motivation, personal beliefs, and social circumstances. In older adults, daily routines and healthcare decisions may also be influenced by family members who assist with meals, medication management, transportation, and clinical appointments. Consequently, conventional disease-centered treatment may be insufficient to address the behavioral and psychosocial factors affecting hypertension management. A comprehensive approach should therefore incorporate clinical evaluation, assessment of health behaviors, patient education, and collaborative decision-making to identify practical strategies that can be sustained in everyday life (McEvoy et al., 2024).

Family medicine provides an important framework for managing chronic diseases through continuous, comprehensive, and patient-centered healthcare. Unlike approaches focused exclusively on physiological abnormalities, family medicine considers the interactions between biological, psychological, social, and environmental factors that may influence health outcomes. The family can function as an important source of emotional support, practical assistance, and motivation, while family routines and shared health beliefs may also create barriers to lifestyle modification. Arbogast et al. (1978) emphasized the importance of considering the family as an interconnected system of support and stressors within clinical assessment. In hypertension management, this perspective is particularly relevant because dietary practices, physical activity, medication-taking behavior, and healthcare utilization may be influenced by household relationships and responsibilities. Evaluating these contextual factors may help clinicians develop more realistic and individualized management plans.

Structured family assessment instruments can provide additional information about the psychosocial context of chronic disease management. The Family APGAR instrument, introduced by Smilkstein (1978), evaluates five dimensions of perceived family functioning: Adaptation, Partnership, Growth, Affection, and Resolve. This instrument offers a practical approach to identifying family strengths and potential areas requiring additional support. Complementary assessment of family resources may include the SCREAM framework, which considers social, cultural, religious, economic, educational, and medical resources. Together, these approaches can support a broader understanding of the patient's family environment and identify potential resources or barriers relevant to chronic disease care. Nevertheless, favorable family functioning does not necessarily guarantee optimal medication adherence or sustained behavioral change, highlighting the importance of assessing these outcomes independently (Mancia et al. 2023; WHO. 2021).

Patient education and behavioral counseling are essential components of long-term hypertension management, particularly when individuals recognize the importance of treatment but experience difficulties translating medical recommendations into consistent daily practices. Counseling approaches that explore readiness for change, perceived benefits, personal obstacles, and available social support may help clinicians formulate individualized recommendations (Appel et al. 1997; Sacks et al. 2001). The 5A framework, incorporating Ask, Advise, Assess, Assist, and Arrange, provides a structured approach to clinical counseling, while the 5R framework emphasizes Relevance, Risks, Rewards, Roadblocks, and Repetition. These frameworks are traditionally associated with tobacco-use interventions and should not automatically be interpreted as validated hypertension-specific interventions. Nevertheless, selected principles may be adapted to support discussions regarding medication adherence, dietary behavior, physical activity, and long-term self-management, provided that their application and outcomes are clearly documented. Within family-centered care, involving household members in counseling may help align recommended lifestyle changes with the patient's actual living circumstances.

This case report describes the holistic assessment and family-centered management of hypertension in an 82-year-old male receiving primary healthcare services in Bandar Lampung, Indonesia. The patient had a history of hypertension since 2010, reported declining kidney function since 2020, and a documented blood pressure of 118/79 mmHg during clinical assessment. Although the patient reported regular medication use and routine healthcare attendance, the family assessment identified challenges related to dietary habits and insufficient physical activity. A Family APGAR score of 10 indicated highly functional family relationships, while the SCREAM assessment suggested the presence of supportive family resources. These findings provide an opportunity to examine how clinical status, family functioning, health-related beliefs, and lifestyle barriers can be integrated into individualized hypertension management. Therefore, this report aims to describe the application of a holistic family medicine approach, including family assessment and behavioral counseling, while highlighting its potential educational implications and the importance of structured follow-up for evaluating long-term hypertension control.

2. Materials and Methods

2.1. Study Design and Clinical Setting

This study employed a descriptive, single-patient case report design to examine the application of holistic assessment and family-centered management in an older adult with hypertension. The case was documented as part of a Family Doctor educational module involving medical students from Malahayati University, Bandar Lampung, Indonesia. The clinical and family assessment was conducted through a home

visit on May 6, 2026, within the service area of Ardhito Medika Way Halim Primary Clinic, Bandar Lampung. The report addresses clinical characteristics, medical history, family functioning, lifestyle-related barriers, counseling interventions, and planned follow-up. The manuscript was organized with reference to the CARE reporting guidelines, which provide a framework for transparent presentation of clinical case information, diagnostic assessment, therapeutic intervention, and outcomes ([Gagnier et al., 2013](#)).

2.2. Patient Information and Data Collection

The subject was an 82-year-old male with hypertension diagnosed in 2010 and a reported history of declining kidney function since 2020. The patient lived with his spouse, who also had a history of hypertension and reported impaired kidney function. The original report described data collection through direct patient interviews, review of available medical records, observation of the home environment, and holistic family assessment. The collected information included medical history, medication use, lifestyle behaviors, healthcare attendance, family relationships, perceived health beliefs, and sources of social support. Clinical assessment included blood pressure, heart rate, respiratory rate, and body temperature. The available medical history also documented previous antihypertensive prescriptions and relevant health conditions. No laboratory measurements of kidney function were provided in the source manuscript.

2.3. Holistic and Family Function Assessment

A biopsychosocial approach was used to evaluate clinical, behavioral, and family-related factors associated with hypertension management. Assessment focused on dietary habits, physical activity, medication-taking behavior, healthcare utilization, and family support. Family functioning was assessed using the Family APGAR framework, which evaluates Adaptation, Partnership, Growth, Affection, and Resolve. This instrument was developed to provide a brief assessment of perceived family functioning in clinical practice ([Smilkstein, 1978](#); [Kebebew et al. 2026](#); [Bosworth et al. 2009](#); [Mancia et al. 2023](#)). The original case report documented an overall Family APGAR score of 10, but individual item scores were not provided. Family resources were also examined using the SCREEM framework, encompassing Social, Cultural, Religious, Economic, Educational, and Medical resources. The original report described these dimensions as generally supportive of hypertension management. However, domain-specific scores or detailed assessment responses were not presented. A genogram was identified as one of the family assessment tools, although the original manuscript did not provide a completed genogram or sufficient relationship information for independent reconstruction.

2.4. Family-Centered Counseling and Intervention

The family-centered intervention consisted of education concerning hypertension, long-term medication adherence, dietary modification, physical activity, recognition of warning symptoms, and routine blood pressure monitoring. Counseling emphasized reducing excessive dietary sodium and high-fat food consumption, improving dietary quality, and encouraging regular physical activity according to the patient's capabilities. The original manuscript described the use of a patient-centered counseling approach informed by the 5A framework: Ask, Advise, Assess, Assist, and Arrange. These components were used to structure the discussion of the patient's health history, treatment practices, readiness to maintain healthy behaviors, perceived obstacles, and follow-up planning.

The manuscript additionally described a 5R framework consisting of Relevance, Risks, Rewards, Roadblocks, and Repetition. The discussion emphasized the relevance of continued hypertension control, possible complications of uncontrolled blood pressure, potential benefits of healthy behaviors, practical lifestyle barriers, and reinforcement of health education. The 5A–5R frameworks originated primarily in tobacco-use counseling and were described in the present case as approaches to behavioral counseling rather than validated hypertension-specific outcome measures ([Fiore et al., 2008](#)). Because smoking status was inconsistently reported in the original manuscript, smoking cessation was not considered a confirmed patient-specific intervention in this revised methodological account. The patient's spouse was involved in family counseling and was encouraged to support dietary modifications, regular medication use, physical activity, and attendance at routine health examinations.

2.5. Outcome Assessment and Follow-up Planning

The clinical information available for evaluation included a documented blood pressure measurement, reported medication-taking behavior, lifestyle assessment findings, and Family APGAR and SCREEM results. Counseling discussions also addressed perceived barriers to maintaining healthy behaviors. The original manuscript described plans for continued blood pressure monitoring, maintenance of home records, and follow-up visits at weekly or two-week intervals. However, it did not provide a complete record of subsequent visits, serial blood pressure measurements, or standardized pre- and post-intervention evaluations. Consequently, the present report describes the assessment and counseling activities without interpreting the available observations as evidence of a measurable intervention effect. Sustained improvement in blood pressure, medication adherence, dietary behavior, or physical activity could not be independently established from the reported data.

2.6. Ethical Considerations

The revised case report should protect patient confidentiality by excluding names, residential addresses, and other directly identifying information. Consent for publication and any institutional requirements concerning ethical review or exemption must be confirmed by the authors before submission. The original manuscript did not provide sufficient information to verify these requirements. No identifiable patient photographs or personal family records should be published without appropriate authorization.

3. Results and Discussion

3.1. Patient Characteristics and Clinical Findings

An 82-year-old male patient with a history of hypertension diagnosed in 2010 underwent a comprehensive family medicine assessment during a home visit conducted on May 6, 2026, within the service area of Ardrito Medika Way Halim Primary Clinic, Bandar Lampung, Indonesia. The patient was retired and lived with his spouse, who also had a history of hypertension and reported impaired kidney function. The patient had experienced declining kidney function since 2020, although laboratory findings supporting this history were not included in the available documentation. The initial clinical examination revealed a blood pressure of 118/79 mmHg, heart rate of 80 beats/min, respiratory rate of 20 breaths/min, and body temperature of 36.6°C. The recorded blood pressure was within a controlled range at the time of assessment. However, the absence of serial blood pressure measurements prevented evaluation of long-term blood pressure stability or changes following the educational intervention (Burnier and Egan 2019; Conn et al. 2015).

The patient's medical history included previous laryngeal tuberculosis in 2015 and a laryngeal biopsy performed during the same year. Historical antihypertensive treatment included captopril, followed by a documented regimen of candesartan 8 mg once daily and bisoprolol 5 mg once daily in 2023. The available case report described regular antihypertensive medication use and routine healthcare attendance. Nevertheless, the complete medication regimen at the time of the 2026 home visit was not independently confirmed. Family medical history indicated no reported hypertension among the patient's parents or grandparents, although one sibling had experienced a stroke associated with uncontrolled blood pressure. The patient reported no known drug or food allergies. Lifestyle assessment identified frequent consumption of high-salt and high-fat foods, limited intake of fruits and vegetables, and insufficient regular physical activity. These findings suggested that modifiable cardiovascular risk factors remained relevant despite the controlled blood pressure recorded during the visit. The patient's clinical characteristics are summarized in **Table 1**.

Table 1. Demographic Characteristics, Medical History, and Clinical Findings of the Patient

Parameter	Documented finding
Age / sex	82 years / Male
Clinical setting	Primary healthcare home visit
Assessment date	May 6, 2026
Hypertension history	Diagnosed in 2010
Kidney function history	Declining function reported since 2020
Blood pressure	118/79 mmHg
Heart rate	80 beats/min
Respiratory rate	20 breaths/min
Body temperature	36.6°C
Historical antihypertensive medication	Captopril, 2013
Later documented medication	Candesartan 8 mg; bisoprolol 5 mg, 2023
Medication adherence	Reported regular use
Dietary habits	High salt and fat intake; limited fruits and vegetables
Physical activity	Insufficient regular exercise
Family history	One sibling with a history of stroke
Family APGAR	10/10
Renal laboratory results	Not reported
Serial blood pressure data	Not reported

Note: The table summarizes the original case documentation. The 2023 medication regimen should not be assumed to represent the verified prescription at the May 2026 assessment.

3.2. Holistic and Family Function Assessment

The holistic assessment evaluated biological, psychological, behavioral, and family-related factors potentially influencing long-term hypertension management. From a biological perspective, the patient had a history of hypertension extending over approximately 16 years and a reported decline in kidney function. Although blood pressure was within a controlled range at the documented examination, the patient's age, reported renal history, and lifestyle characteristics supported the need for continued cardiovascular risk assessment. The behavioral assessment revealed difficulties maintaining recommended dietary practices and regular physical activity. The patient reportedly understood the importance of hypertension management and attended healthcare services regularly, but continued to experience challenges limiting high-salt and high-fat foods. These findings indicated that awareness of chronic disease management did not necessarily translate into consistent lifestyle modification.

Family functioning was assessed using the Family APGAR instrument, which evaluates Adaptation, Partnership, Growth, Affection, and Resolve (Smilkstein, 1978). The patient obtained a total score of 10 out of 10, consistent with highly functional family relationships according to the conventional interpretation of the instrument. This result suggested the presence of favorable perceived family support, although individual item responses were not available. The SCREEM assessment examined family resources across social, cultural, religious, economic, educational, and medical dimensions. The original case report characterized these resources as generally supportive. The patient's spouse was identified as an important source of assistance in maintaining treatment routines, attending healthcare appointments, and supporting healthy behaviors. However, the absence of detailed domain-specific findings prevented a more comprehensive evaluation of the relative contributions of individual family resources. The assessment also identified a reported belief that antihypertensive medications may negatively

affect kidney function. This concern represented a potentially important topic for counseling, although the available documentation did not establish whether it affected the patient's actual medication-taking behavior. The principal findings of the holistic family assessment are presented in **Table 2**.

Table 2. Holistic Assessment, Family Function, and Lifestyle-Related Barriers

Assessment domain	Findings	Clinical relevance
Biological	Long-standing hypertension; reported renal impairment	Continued clinical monitoring
Psychological	Awareness of hypertension management; some difficulty sustaining lifestyle changes	Individualized counseling
Family APGAR	Total score 10/10	Highly functional perceived family relationships
SCREEM	Generally supportive resources	Potential support for chronic disease management
Medication behavior	Regular use reported	Adherence should be monitored
Health beliefs	Concern regarding medication effects on kidney function	Opportunity for medication counseling
Dietary behavior	High-salt and high-fat foods	Modifiable cardiovascular risk factor
Physical activity	Insufficient regular exercise	Lifestyle intervention opportunity
Family involvement	Spousal support	Potential assistance with self-management

Note: APGAR item-level results and detailed SCREEM responses were not supplied in the original manuscript. The table does not represent independently validated domain scores.

3.3. Family-Centered Counseling and Management

Family-centered counseling was provided to address the patient's long-term hypertension management, lifestyle-related risk factors, and perceived barriers to maintaining recommended health behaviors. The intervention emphasized continued antihypertensive medication use as prescribed, regular blood pressure monitoring, dietary modification, appropriate physical activity, and recognition of symptoms that may require further medical evaluation. Dietary counseling focused on reducing excessive sodium intake and limiting high-fat foods while encouraging healthier food choices. The patient was advised to improve fruit and vegetable consumption and incorporate regular physical activity according to individual tolerance and functional capacity. Education also emphasized that a controlled blood pressure measurement does not eliminate the need for continued treatment and monitoring.

The counseling approach incorporated principles of the 5A framework, including Ask, Advise, Assess, Assist, and Arrange. The patient's understanding of hypertension, medication-taking behavior, and lifestyle practices was explored, followed by individualized recommendations addressing identified barriers. Practical assistance focused on dietary choices, establishing physical activity routines, and planning continued blood pressure assessment. The 5R framework was additionally described as a motivational approach addressing Relevance, Risks, Rewards, Roadblocks, and Repetition. The counseling emphasized the relevance of long-term blood pressure control, the potential consequences of uncontrolled hypertension, the benefits of sustained healthy behaviors, and barriers to following dietary and physical activity recommendations. These components were used as a structured means of organizing patient education rather than as validated measures of intervention effectiveness (Cornelissen and Smart 2013; Kebebew et al. 2026).

Family involvement represented a central element of the management approach. The patient's spouse was encouraged to support healthier household dietary practices, reinforce medication adherence, participate in appropriate physical activities, and assist with regular healthcare attendance. Follow-up visits and home blood pressure recording were recommended to support continuity of care. Although the original manuscript described plans for weekly or biweekly follow-up, it did not provide sufficient information to establish the number of subsequent visits completed or the outcomes measured during those visits. Therefore, the reported intervention is best characterized as an individualized counseling and family support strategy rather than a demonstrated improvement in hypertension control.

3.4. Clinical Outcomes and Follow-up

The documented clinical assessment showed a blood pressure of 118/79 mmHg, accompanied by a reported history of regular antihypertensive medication use and routine healthcare attendance. The Family APGAR score of 10 indicated favorable perceived family functioning, while the SCREEM assessment suggested the availability of supportive family resources. Together, these findings described a patient with controlled blood pressure at the documented examination and a potentially favorable family environment for long-term chronic disease management. The original report also described improved understanding of hypertension management and greater motivation to maintain recommended health behaviors following counseling. However, these outcomes were not supported by standardized knowledge assessments, validated medication adherence measures, or objective pre- and post-intervention comparisons.

Furthermore, no serial blood pressure measurements, follow-up laboratory findings, or structured records of dietary and physical activity changes were provided. Consequently, the available evidence does not establish that the intervention produced measurable improvements in blood pressure, medication adherence, or lifestyle-related risk factors. The principal documented outcome was the completion of a holistic family medicine assessment and counseling intervention in a patient with a controlled blood pressure measurement. Longer-term effectiveness remains undetermined because of insufficient longitudinal clinical data.

3.5. Hypertension Management in Older Adults

Long-term hypertension management in older adults requires an individualized approach that considers cardiovascular risk, functional

capacity, medication tolerance, comorbidities, and the patient's ability to maintain recommended health behaviors. Although pharmacological treatment remains central to blood pressure control, the complexity of chronic disease management increases with age because of physiological changes, competing health priorities, and the potential for medication-related adverse effects. The 2024 European Society of Cardiology guidelines emphasize individualized treatment decisions and the importance of assessing tolerability, frailty, and concurrent medical conditions when determining blood pressure targets in older patients (McEvoy et al., 2024).

In the present case, the recorded blood pressure of 118/79 mmHg indicated a controlled measurement at the time of clinical evaluation. However, this finding should not be interpreted as definitive evidence of sustained hypertension control because serial blood pressure measurements were unavailable. The patient's long history of hypertension and regular use of antihypertensive medication suggested ongoing disease management, but the available data did not establish the duration or consistency of blood pressure control. The patient's age also highlights the importance of evaluating treatment safety, orthostatic symptoms, and functional status. Although the documented vital signs did not indicate acute instability, the original case report did not include orthostatic blood pressure measurements, frailty assessment, or a comprehensive evaluation of medication-related adverse effects. These limitations restrict further interpretation of the appropriateness of the individual's treatment target. Therefore, the principal clinical consideration is the need to maintain individualized long-term management rather than intensify treatment solely on the basis of one clinical measurement.

3.6. Renal Function, Medication Adherence, and Health Beliefs

The patient's reported history of declining kidney function since 2020 represents an important consideration in long-term hypertension management. Hypertension and kidney dysfunction are closely interconnected, as sustained elevations in blood pressure can contribute to renal injury, while impaired renal function may complicate blood pressure regulation and pharmacological treatment. The Kidney Disease: Improving Global Outcomes guidelines recommend evaluating kidney function and albuminuria to establish the presence, severity, and progression of chronic kidney disease (KDIGO CKD Work Group, 2024). In this case, the original clinical documentation did not provide serum creatinine, estimated glomerular filtration rate, urine albumin-to-creatinine ratio, or other relevant laboratory findings. Consequently, the reported decline in kidney function could not be independently verified or classified according to chronic kidney disease stage. This represents an important limitation because renal function may influence medication selection, treatment monitoring, and cardiovascular risk assessment.

The historical medication records included candesartan and bisoprolol, although the complete medication regimen at the time of the home visit was not verified. Candesartan, an angiotensin receptor blocker, may have cardiovascular and renal indications depending on the patient's clinical condition. However, assessment of treatment safety requires consideration of kidney function, serum potassium, blood pressure response, and other patient-specific factors. The available case information was insufficient to determine whether these monitoring requirements had been fulfilled. Another relevant finding was the reported belief that antihypertensive medications could impair kidney function. Medication-related concerns may influence long-term treatment behavior, even among patients who report regular medication use. Therefore, individualized counseling should address the potential benefits and risks of prescribed treatment using clear explanations tailored to the patient's understanding (Conn et al. 2016a; 2016b; 2016c). Involving family members may provide additional support for discussing medication concerns and reinforcing appropriate treatment practices. However, the present report did not establish that these beliefs caused non-adherence, and no validated adherence assessment was available.

3.7. Family Function and Lifestyle Modification

Family support represents an important contextual factor in chronic disease management because household relationships may influence dietary behavior, medication routines, physical activity, and healthcare utilization. In the present case, the Family APGAR score of 10 suggested highly functional perceived family relationships, providing a potentially favorable environment for continued hypertension management. The Family APGAR instrument is designed to assess perceived family functioning rather than directly measure medication adherence or clinical treatment effectiveness (Smilkstein, 1978). Despite favorable family functioning, the patient continued to experience difficulties maintaining recommended lifestyle practices. Frequent consumption of high-salt and high-fat foods and insufficient regular physical activity were identified as important behavioral concerns. These findings suggest that strong family relationships do not necessarily eliminate barriers to chronic disease self-management. Rather, family support may represent a resource that can be incorporated into individualized counseling and behavior-change planning.

The SCREEM assessment further suggested generally supportive family resources across social, cultural, religious, economic, educational, and medical dimensions. However, because detailed domain-specific findings were unavailable, the relative importance of individual resources could not be established. The assessment should therefore be interpreted as a qualitative description of the patient's family environment rather than a quantitative demonstration of its influence on blood pressure control. The family-centered intervention sought to translate the patient's existing support into practical assistance with dietary choices, medication reminders, healthcare attendance, and physical activity. These strategies are consistent with the broader principle that sustainable hypertension management should consider individual preferences and daily living circumstances. Nevertheless, the present case did not document measurable changes in these behaviors after counseling. Therefore, the findings demonstrate the identification of potentially modifiable lifestyle barriers and the application of family-oriented counseling, rather than confirmed behavioral improvement (Tucker et al. 2017).

3.8. Behavioral Counseling and the 5A–5R Framework

Behavioral counseling was incorporated into the intervention to address the patient's understanding of hypertension, motivation for maintaining healthy behaviors, and barriers to long-term disease management. The original manuscript described the application of the 5A framework, consisting of Ask, Advise, Assess, Assist, and Arrange, and the 5R framework, consisting of Relevance, Risks, Rewards, Roadblocks, and Repetition. These approaches have been widely described in tobacco-use counseling, where structured communication and motivational strategies are used to support behavioral change (Fiore et al., 2008). In the present case, the counseling principles were adapted

to discussions concerning medication adherence, dietary habits, physical activity, and routine blood pressure monitoring. The 5A components provided a structure for exploring the patient's health behaviors, communicating clinical recommendations, assessing readiness to maintain lifestyle changes, identifying practical solutions, and planning continued care. Similarly, the 5R components were used to discuss the importance of hypertension control, possible complications, expected benefits of treatment adherence, and obstacles to sustained behavior change.

However, the application of these frameworks requires careful interpretation. Their use in a hypertension case report does not independently demonstrate that the adapted intervention is effective for blood pressure reduction or long-term adherence improvement. Furthermore, the original manuscript contained contradictory information regarding smoking status, and the available records did not establish that tobacco cessation counseling was clinically indicated for this patient. Consequently, the 5A–5R approach is discussed here as an adapted counseling structure rather than evidence of a smoking cessation intervention or a validated hypertension-specific treatment protocol. The potential educational value of this approach lies in its systematic consideration of patient motivation and practical barriers. Nevertheless, demonstrating its effectiveness would require structured follow-up, documented intervention fidelity, and measurable outcomes such as serial blood pressure readings, medication adherence scores, or changes in lifestyle behaviors.

3.9. Study Limitations and Implications for Primary Healthcare

Several limitations should be considered when interpreting this case report. First, the study involved a single patient, limiting the generalizability of the findings. Second, only one blood pressure measurement was explicitly documented, preventing evaluation of sustained blood pressure control or changes following the intervention. Third, the reported history of impaired kidney function was not supported by available laboratory measurements, restricting assessment of renal disease severity and medication safety. Fourth, although the Family APGAR assessment provided a total score of 10, individual item responses were not reported, and detailed SCREEM findings were unavailable. Fifth, medication adherence, dietary behavior, physical activity, and patient knowledge were assessed descriptively without standardized pre- and post-intervention measurements. Sixth, the number and timing of completed follow-up visits were not clearly documented. Finally, inconsistencies concerning smoking status and historical disease onset limited interpretation of certain elements of the original clinical narrative.

Despite these limitations, the case illustrates how a holistic family medicine assessment can identify clinical characteristics, health beliefs, behavioral barriers, and potential family resources relevant to chronic hypertension management. The principal contribution is the description of an individualized assessment and counseling process rather than demonstration of intervention effectiveness. From a primary healthcare perspective, this case supports the importance of integrating clinical monitoring with family and lifestyle assessments, particularly in older patients with long-standing hypertension and possible comorbidities. Future clinical documentation should incorporate repeated blood pressure measurements, verification of renal function, structured medication reviews, standardized adherence assessments, and clearly recorded follow-up outcomes. These measures would strengthen clinical decision-making and provide more reliable evidence for evaluating family-centered interventions.

4. Conclusions

This case report highlights the importance of holistic assessment and family-centered care in the long-term management of hypertension among older adults. The 82-year-old patient had a history of hypertension, reported declining kidney function, and a documented blood pressure of 118/79 mmHg during clinical assessment. Although the patient reported regular medication use and routine healthcare attendance, several lifestyle-related challenges remained, particularly excessive dietary salt intake and insufficient physical activity. The Family APGAR score of 10 indicated highly functional family relationships, while the SCREEM assessment suggested the availability of supportive family resources. The family-centered intervention incorporated individualized health education, lifestyle counseling, medication adherence reinforcement, and family involvement in routine disease management. However, the absence of serial blood pressure measurements and structured follow-up outcomes prevented a definitive evaluation of intervention effectiveness. Overall, this case demonstrates the practical application of a holistic family medicine approach to identifying patient-specific barriers and incorporating family support into chronic disease management. Continued clinical monitoring, assessment of kidney function, and objective evaluation of behavioral changes are essential for supporting sustained hypertension control and improving the quality of primary healthcare.

Author Contributions: Conceptualization, PAW and RR; methodology, PAW and MIK; validation, RR and HAW; formal analysis, PAW, MIY, and NF; investigation, PAW, MIK, HAW, MIY, NF, and NAA; resources, RR and HAW; data curation, MIY and NF; writing—original draft preparation, PAW, MIY, and NF; writing—review and editing, RR, MIK, and HAW; visualization, NF and NAA; supervision, RR; project administration, PAW and NAA. All authors have read and agreed to the published version of the manuscript.

Funding: This study did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Ethical Clearance: Not applicable. Ethical clearance was not required for this case report as it involved routine clinical management without experimental intervention.

Informed Consent Statement: Written informed consent has been obtained from the patient's guardian to publish this case report, including clinical details and images.

Data Availability Statement: All data supporting the findings of this study are contained within the article. No additional datasets were generated or analyzed.

Acknowledgments: The authors would like to express their sincere gratitude to the Faculty of Medicine, Malahayati University, Bandar Lampung, Indonesia, for its academic guidance and support during the preparation of this case report. Appreciation is also extended to the healthcare professionals at Ardhito Medika Way Halim Primary Clinic for their assistance in facilitating the family medicine assessment and home-visit activities. The authors acknowledge the cooperation of the patient and his family during the clinical assessment and counseling process.

Conflicts of Interest: The authors declare that there are no conflicts of interest regarding the publication of this article.

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