



LTC : HYPERTENSION

+ BISMA AMIN (2435002) +

+ Community Care & Management of LTCs +

+ (LCHS7003) Component 2 Individual Presentation +

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INTRODUCTION

One of the most prevalent chronic illnesses in the world and a significant modifiable risk factor for cardiovascular disease (CVD) is hypertension. It is a major clinical, financial, and social burden in the UK, necessitating close interdisciplinary cooperation between general practitioners, health visitors, and social workers.



What is hypertension?

Hypertension is defined as a persistent elevation of blood pressure above:

- $\geq 140/90$ mmHg in clinic
- $\geq 135/85$ mmHg at home or ABPM, as per NICE NG136 (2019).

It is a *silent* condition because many individuals remain asymptomatic for years.



SYMPTOMS

Most patients are asymptomatic, but when symptoms occur, they may include:

Headache

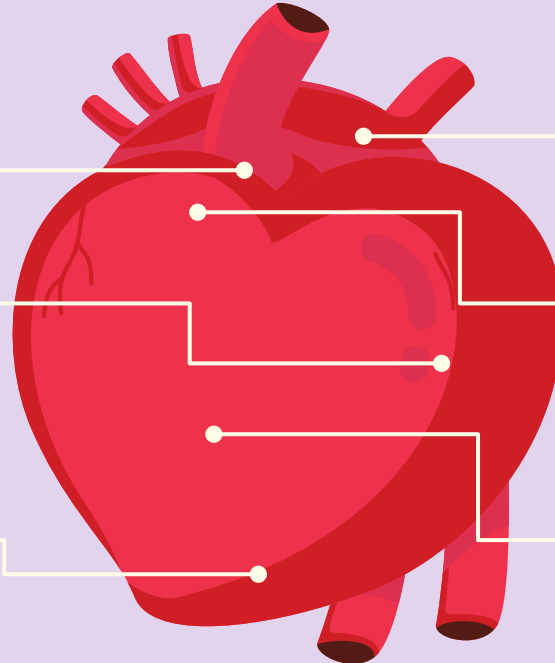
Dizziness

Visual Disturbance

Nasal Bleeding

Fatigue

Chest Pain



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AETIOLOGY (Causes)

Primary Hypertension 90-95%

- Age-Related Vascular Changes
- Obesity
- Alcohol Access
- High Salt Intake
- Genetics & Family History
- Psychosocial Stress
- Sedentary Lifestyle

Secondary Hypertension 5-10%

- Renal Disease
- Endocrine Disorders (Hyperaldosteronism & Thyroid Dysfunction)
- Medications (Steroids, NSAIDs & Oral Contraceptives)



PREVALENCE UK & Worldwide

United Kingdom

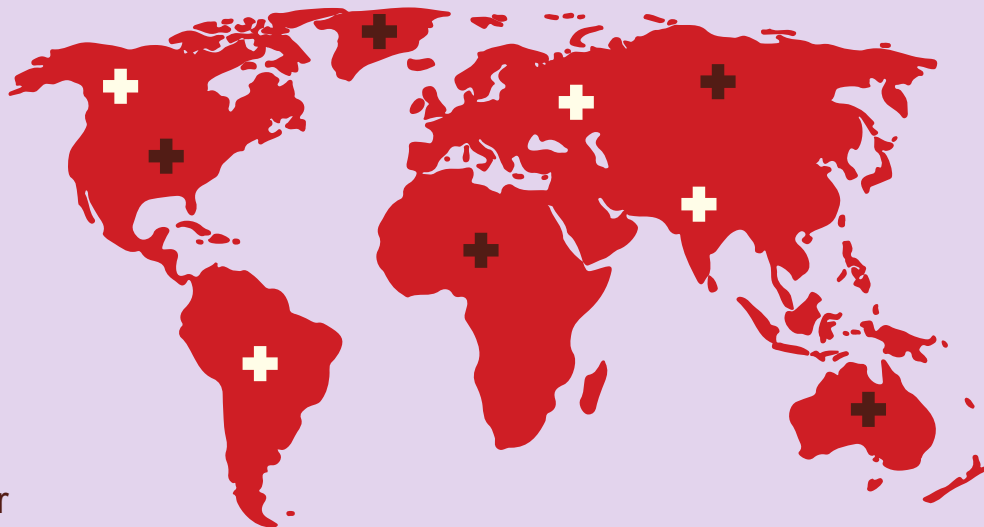
14.4M

- Around 14.4 million adults have hypertension.
- 1 in 3 adults is affected.
- Half of all cases remain undiagnosed, particularly in deprived communities.

Worldwide

1.28B

- Over 1.28 Billion adults globally have hypertension.
- Prevalence increasing in younger adults due to obesity and lifestyle changes.



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ECONOMIC & SOCIAL BURDEN

Hypertension contributes to:



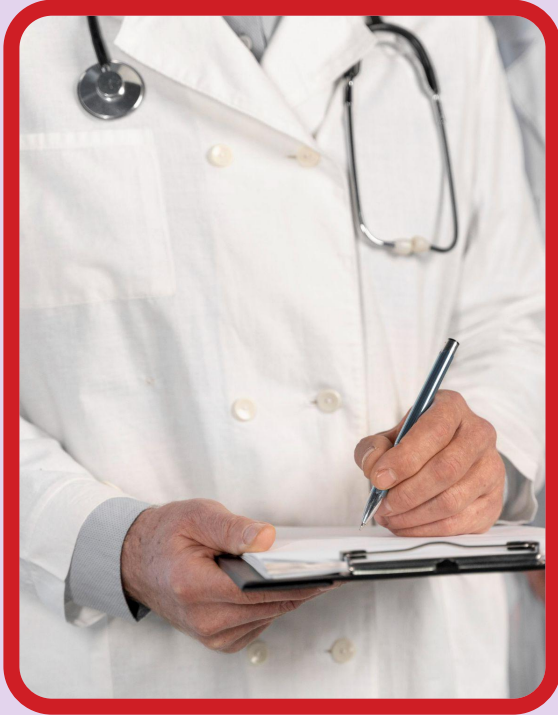
Economic Burden

- Leading cause of stroke & myocardial infarction
- Estimated £2.1 billion annually spent on CVD secondary to hypertension (Public Health England).
- Increased emergency admissions and long-term medication costs



Social Burden

- Reduced quality of life and productivity
- Increased caring responsibilities for families
- Health inequalities: higher rates in low-income, ethnic minority, and socially deprived groups



DIAGNOSIS



Step 1 – Clinic BP

- If $\geq 140/90$ mmHg, proceed to confirmatory monitoring.

Step 2 – ABPM (Gold Standard)

- An average daytime reading of $\geq 135/85$ mmHg confirms the diagnosis.

Step 3 – HBPM

- Twice-daily readings for at least 4 days (preferably 7).
- An average of $\geq 135/85$ mmHg confirms hypertension.

Severe Hypertension

- $\geq 180/120$ mmHg → same-day assessment for organ damage.

INITIAL ASSESSMENT

Most patients are asymptomatic, but when symptoms occur, they may include:

- + Full cardiovascular risk assessment (QRISK3)
- + Medical, family, and lifestyle history
- + Physical examination
- + Blood tests (renal function, HbA1c, lipids)
- + Urinalysis (proteinuria)
- + ECG (LVH assessment)



For social workers and health visitors: Holistic assessment of environmental, psychosocial, housing and compliance-related barriers.

MANAGEMENT (NICE GUIDANCE)

Lifestyle Interventions (Available to Everyone):

- Reducing salt intake
- Loss of weight
- Quitting Smoking
- Moderation in Alcohol consumption
- Frequent exercise.
- DASH-style diet

Pharmacological Management

Based on the **NICE treatment algorithm**:

- **ACE Inhibitor or ARB** (e.g., Lisinopril) for individuals <55 years
- **Calcium Channel Blocker** (e.g., Amlodipine) for ≥55 or Black African/Caribbean ethnicity
- **Thiazide-like diuretic** (Indapamide)
- Resistant hypertension: add **Spironolactone** or consider specialist advice

Frameworks & Models Supporting LTC Management

+ 01

House of Care Model (King's Fund)

Encourages:

- Person-centred treatment
- Collaborative decision-making
- Setting goals together

+ 03

MECC (Making Every Contact Count)

Encourages the modification of health-related behaviours during regular interactions.

02 +

NICE Hypertension Quality Standards (QS28)

Ensures:

- Precise diagnosis
- Prompt medical attention
- Modification of risk factors

04 +

Model of Chronic Care

Promotes proactive, interdisciplinary long-term care management.



TREATMENT options in the UK

+ 01

Pharmacological

ACE inhibitors / ARBs

Calcium Channel Blockers

Thiazide-like diuretics

Beta-blockers

Aldosterone antagonists

+ 02

Non-Pharmacological

Lifestyle and dietary modification

Stress management programs

Digital monitoring tools (NHS BP@Home)



COMORBIDITIES

Typically, hypertension coexists with:

Diabetes type 2



Elevated Cholesterol



Chronic Renal illness



Heart Failure



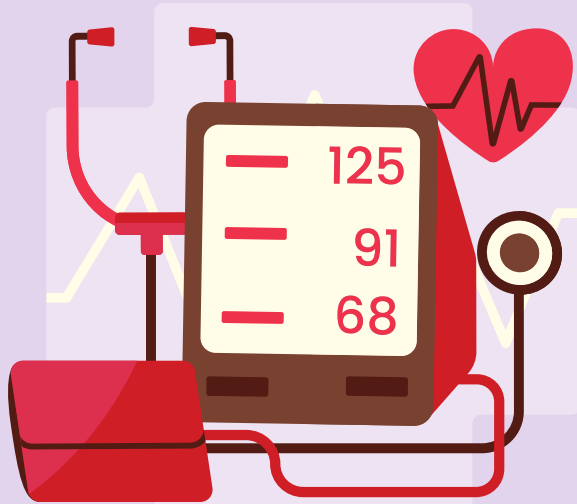
Being Overweight



A Stroke



These comorbidities raise the risk of death and make management more difficult.



How to prevent hypertension?



PREVENTION



Primary Prevention

- Campaigns for public health
- Policies for reformulating salt
- Services for quitting smoking
- Promotion of an active lifestyle
- Using community initiatives to reduce obesity



Secondary Prevention

- NHS Health Checks for early detection
- Patient education
- Frequent observation by general practitioners and health visitors

Skills, Values & Behaviours for Co-Productive Care



Evidence-based Practice



Cultural Awareness



Active listening and empathy



**Dignity, Respect &
Non-Judgemental Mindset**



**Motivational Interviewing
Techniques**



Collaborative Decision Making

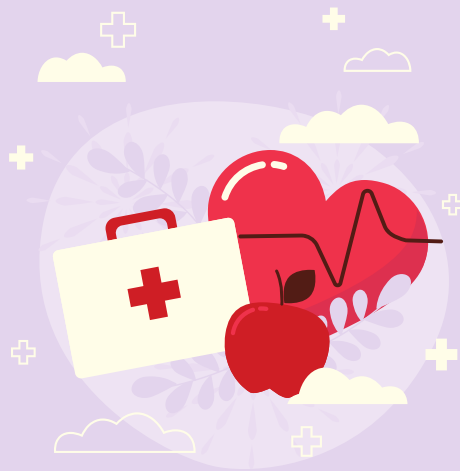
To guarantee that medical, psychosocial, and lifestyle needs are equally met, general practitioners, health visitors, and social workers must work together.

Personalised Care & Self-Management Support

Applying NHS England's Comprehensive Model of Personalised Care:

Six Elements:

- Collaborative decision-making
- Planning for individualised care
- encouraged self-management
- Social prescription
- Budgets for personal health
- Community-based assistance



Relevance to Hypertension:

- Treatment plans that were jointly created
- BP monitoring at home
- Referral to fitness regimens
- Taking social factors (poverty, housing stress) into consideration
- Connecting patients to volunteer and community services

RECOMMENDATIONS

- Boost early detection with ABPM/HBPM
- Boost GP social care cooperation.
- Increase BP screening in the community.
- Use frameworks for behaviour modification in the routine care.
- Incorporate digital self monitoring tools.
- Use focused outreach to address health disparities.
- Teach employees co-production and motivational interviewing techniques.

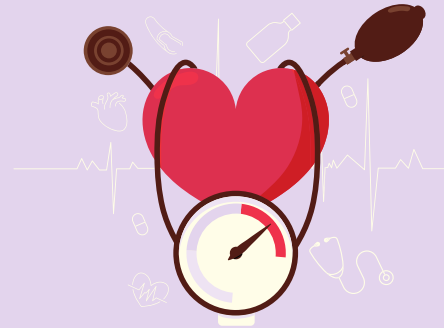


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CONCLUSIONS

Hypertension remains one of the most significant long-term conditions in the UK. Effective management requires:

- **Accurate diagnosis**
- **Timely treatment**
- **Multi-disciplinary collaboration**
- **Patient empowerment through personalised care**



GPs, health visitors, and social workers collectively play a crucial role in improving long-term outcomes.



REFERENCES

- British Heart Foundation UK Factsheet: Statistics on Cardiovascular Disease (2023). BHF, London.
- Adult hypertension: evaluation and management (NG136), National Institute for Health and Care Excellence, 2019. NICE, London.
- Adult hypertension: quality standard (QS28), National Institute for Health and Care Excellence, 2013. NICE, London.
- World Health Organisation: Important Information on Hypertension (2021). WHO, Geneva.
- The Comprehensive Model of Personalised Care, NHS England (2020). NHS England, London.
- Health Matters: Combating High Blood Pressure (Public Health England, 2017). PHE, London.
- Global Disparities of Hypertension Prevalence and Control, Mills, K.T. et al. (2020), The Lancet, 395(10224), pp. 485–493.
- Carey, R.M., and Whelton, P.K. (2018) "Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults," Journal of the American College of Cardiology, 71(19), pp. 127–248.
- Health Equity in England: The Marmot Review 10 Years Later, Marmot, M. et al. (2020). Institute of Health Equity, London.



REFERENCES

- Poulter, N.R. et al. (2015) "Hypertension", The Lancet, 386 (9995), pp. 801–812.
- "ESC/ESH Guidelines for the management of arterial hypertension", Williams, B. et al. (2018), European Heart Journal, 39(33), pp. 3021–3104.
- NHS (2023): Overview of High Blood Pressure (Hypertension). accessible at www.nhs.uk.
- UK Cardiovascular Health Statistics, Townsend, N. et al. (2022). BHF, London.
- Oparil, S. et al. (2018) "Hypertension", Nature Reviews Disease Primers, 4, pp. 18014.
- Cardiovascular Disease: Risk Assessment and Reduction (CG181), NICE (2021). NICE, London.
- NHS England (2021) The BP@Home Monitoring Program. NHS England, London.
- "Diagnosis and Assessment of Hypertension" by Khan, N.A. et al. (2020), British Medical Journal, 371, m4268.
- "Global Burden of Hypertension", Chow, C.K. et al. (2013), Lancet, 382(9904), pp. 957–967.
- "ACC/AHA Hypertension Guideline", Whelton, P.K. et al. (2017), Hypertension, 71(6), pp. e13–e115.



REFERENCES

- NHS Health Check Programme: Best Practice, Public Health England (2016). PHE, London.
- "May Measurement Month: Global Screening Campaign", Beaney, T. et al. (2020), European Heart Journal, 41(22), pp. 2257–2264.
- NICE (2020) Adult Chronic Kidney Disease: Evaluation and Treatment (NG203).
- UK Diabetes (2022) Diabetes and Hypertension: Clinical Advice. Diabetes UK, London.
- The King's Fund (2013) The Model of the House of Care. The King's Fund, London.
- Building the House of Care: Providing Better Services for People with Long-Term Conditions (Coulter, A., Roberts, S., & Dixon, A., 2013). The King's Fund, London.
- Making Every Contact Count (MECC): Consensus Statement, NHS England (2019).
- Health Equity in England: The Marmot Review 10 Years Later, Marmot, M. et al. (2020). Institute of Health Equity, London.
- He, F.J., and MacGregor, G.A. (2018) "Salt Reduction and Hypertension," Annual Review of Public Health, 39, pp. 17–31.
- "Dietary Interventions for the Prevention of Cardiovascular Disease", Rees, K. et al. (2019), Cochrane Database of Systematic Reviews, 3, CD002128.
- Spruill, T. (2010) "Psychosocial Stress and Hypertension," Nature Reviews Cardiology, 7(6), pp. 360–368.
- NHS Digital (2023) Hypertension Dataset, Quality and Outcomes Framework (QOF). NHS Digital, Leeds.
- WHO Salt Reduction Toolkit (2019). WHO, Geneva.
- NICE (2014) Individual Approaches to Behaviour Change (PH49).

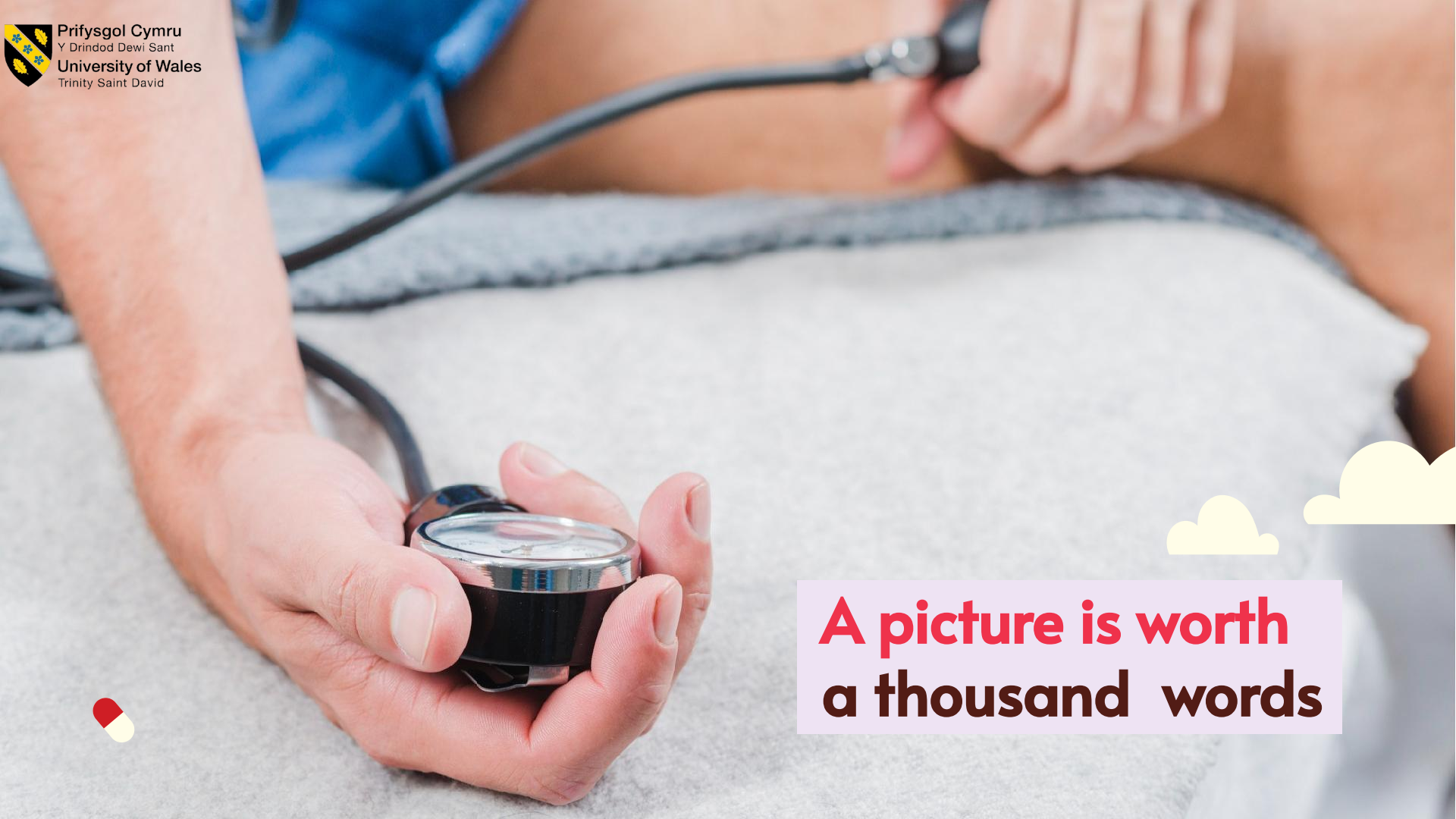


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**A picture is worth
a thousand words**

Thanks!

**+ Together, we may reduce the
impact of hypertension and
build healthier communities
through early detection,
individualised care, and
collaborative efforts.**

BISMA AMIN



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