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:

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

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

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Symptoms

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

Headache

Dizzines
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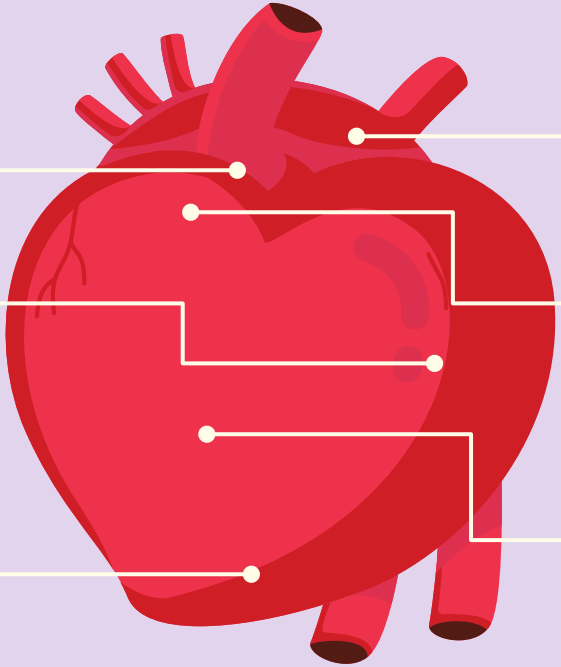

Visual Disturbance

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%

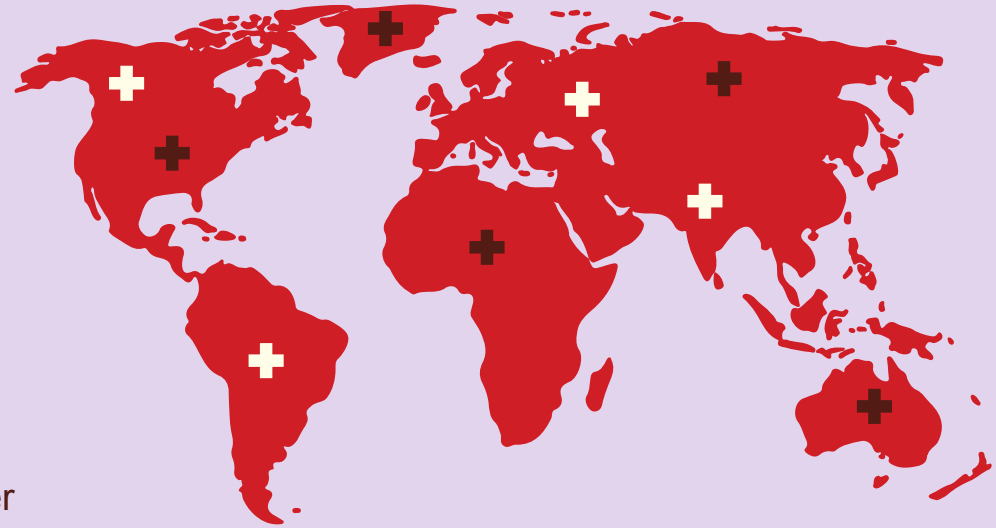
- Renal Disease
- Endocrine Disorders (Hyperaldosteronism & Thyroid Dysfunction)
- Medications (Steroids, NSAIDs & Oral Contraceptives)

Prevalence UK & Worldwide

14.4M

United Kingdom

- 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

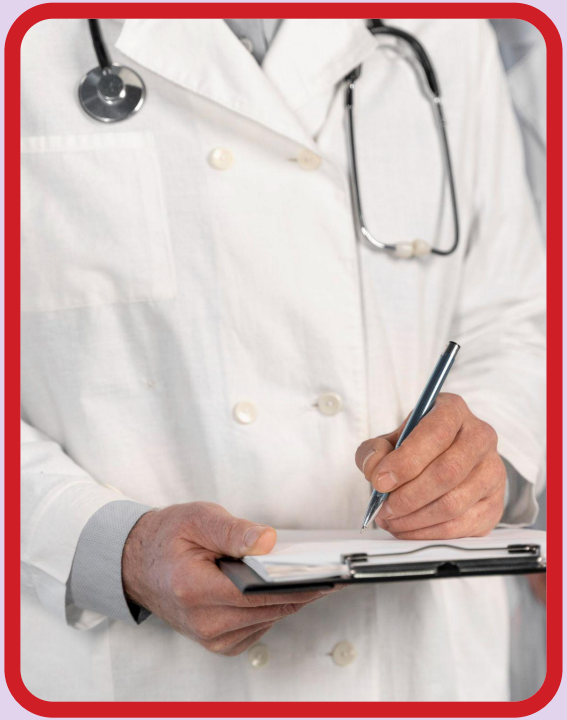
Hypertension contributes to:

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



Diagnosi s

Step 1 – Clinic BP

- If ≥140/90 mmHg, proceed to confirmatory monitoring.

Step 2 – ABPM (Gold Standard)

- An average daytime reading of ≥135/85 mmHg confirms the diagnosis.

Step 3 – HBPM

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

Severe Hypertension

- ≥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

02

NICE Hypertension Quality Standards (QS28)

Ensures:

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

03

MECC (Making Every Contact Count)

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

04

Model of Chronic Care

Promotes proactive, interdisciplinary long-term care management.

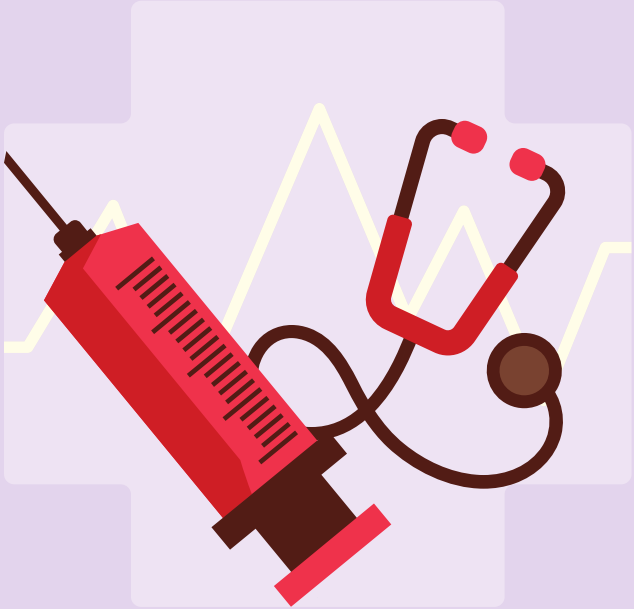
Treatment options in the UK

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)



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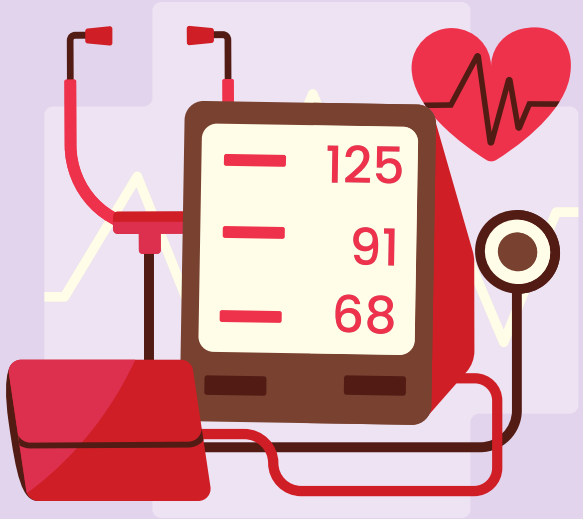
Comorbidities

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?

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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

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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.

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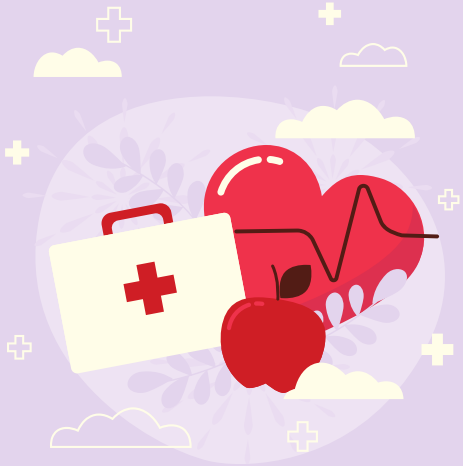
Personalised Care & Self-Management Support

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

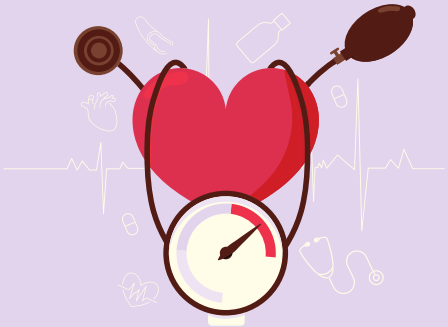
Recommendations

- 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.

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.

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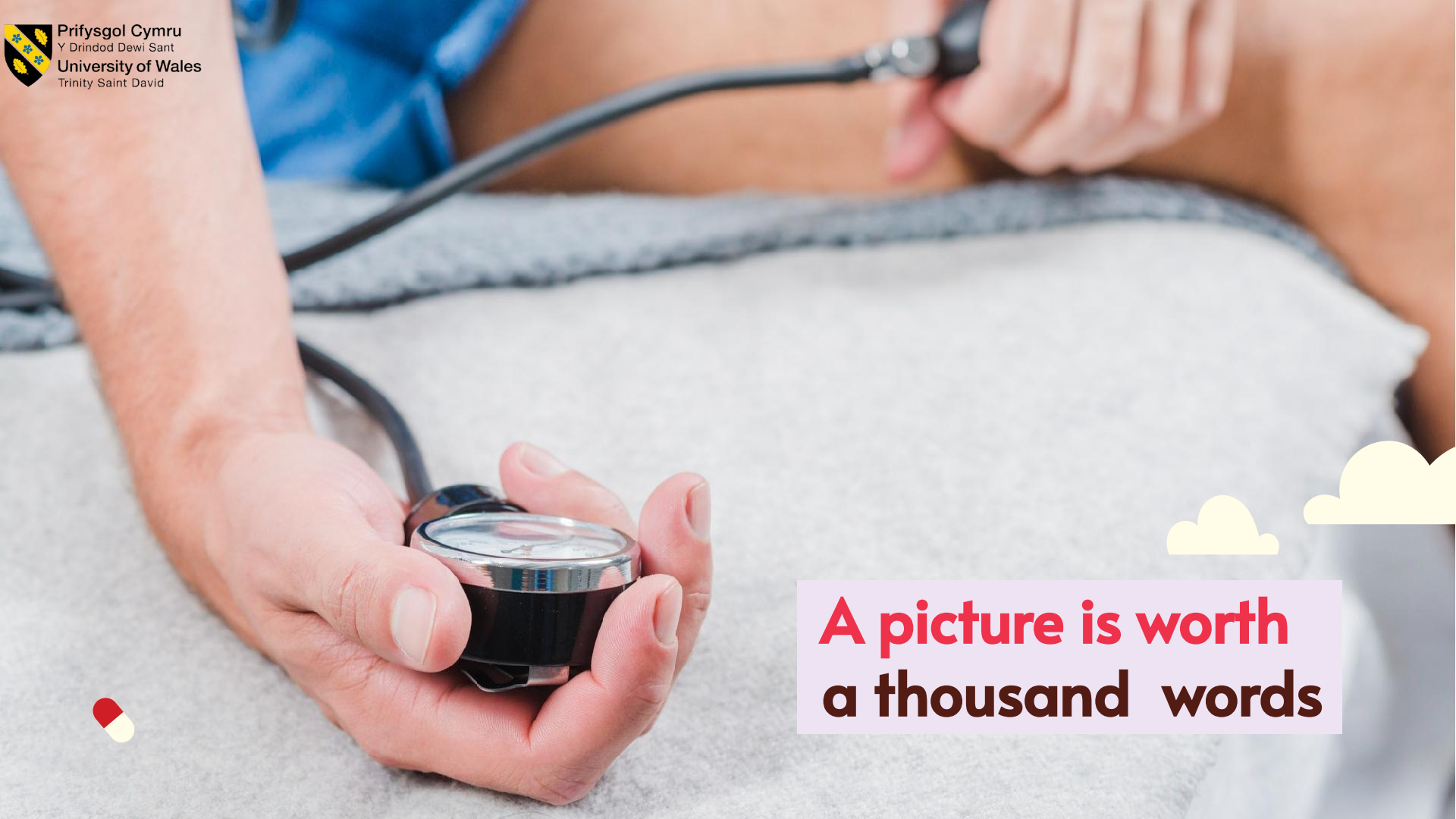

A picture is worth a thousand words

Thanks!

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

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