



Managing Hypertension at Health and Wellness Centres and Sub-centres

What is hypertension?

Hypertension, or high blood pressure (BP), is when either systolic BP (the top number) is '140 mmHg or more' or diastolic BP (the bottom number) is '90 mmHg or more'.

Why is hypertension dangerous?

High BP harms the heart, brain, arteries, kidneys, and blood vessels, and can cause lifelong disability and death. If not controlled, high BP can cause heart attack, stroke, and kidney failure. Hypertension has no symptoms and can affect people of all ages.

The problem of hypertension in India



One in four of Indian adults has high BP

In India, in a sub-centre population of 5000, about 500 adults will have high BP. However, most wouldn't know they have high BP and very few will have it under control.

Treatment of hypertension

With treatment, the risk of heart attack, stroke, kidney failure, and other serious health problems is greatly reduced. But even after being diagnosed with high BP, many patients do not receive proper treatment, leaving them at risk for serious health problems and death. Most deaths due to hypertension occur among persons younger than 70, which in most cases would result in loss of income for the patient's family. Fortunately, regular medication and monitoring of blood pressure will prevent most unnecessary deaths.

Government efforts to control hypertension

The National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS) aims to control these diseases through better care delivery in primary health care settings. The India Hypertension Control Initiative (IHCI) focuses on the strengthening of hypertension management and monitoring at the primary health care level.



Role of ANM or health worker* at HWC/sub-centre

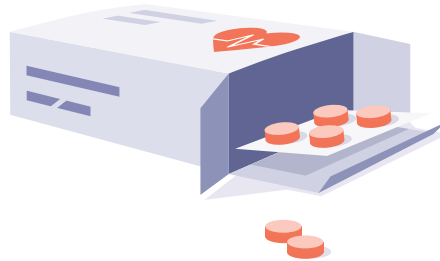
- Compile village level line list of hypertensives
- **Measure BP of all adults ≥ 30 years visiting the centre**
- Mobilise patients detected with high BP to PHC Medical Officer for confirmation
- Maintain a copy of IHCI hypertension treatment cards or the follow-up register



- For follow-up visits of patients on hypertension medications,
 - Measure BP, and if BP is $<140/90$, give one-month drug refills as prescribed by the doctor
 - **Reinforce treatment adherence and counsel on lifestyle management**
 - Enter details of follow-up visits in treatment cards or follow-up register
 - Give appointment for next follow-up visit



- Refer to medical officer if BP of patient is $140/90$ or more, or if patient has other symptoms
- Call/visit homes of patients who missed their visit and request them to return for follow up
- **Receive and maintain anti-hypertensive drugs from PHC pharmacist**



- Submit monthly report of follow-ups, missed visits, referrals and drug stock to PHC
- Organise awareness activities related to NCDs during village level meetings
- Coordinate with local public representatives in awareness activities.

BP should be measured for all adults ≥ 30 years that come to the HWC/Sub-centre

Because most people with high BP have no symptoms, measuring BP is the only way to diagnose this "silent killer". Measuring BP of all adult persons coming to the health facility is important. Any patient with high BP should be referred to a medical officer.

*Health worker could be Multipurpose Health Worker (MPW) either male or female; ANM; JPHN/JHI etc.

How to measure BP

Measure blood pressure of all adults ≥ 30 years

No talking during and between measurements

Back supported

Cuff at heart level

Use correct cuff size and positioning

Small

Medium

Large

1. Use the correct cuff size such that the bladder encircles 80%–100% of the upper arm.

2. Cuff bladder width should be at least 40% of upper arm circumference.

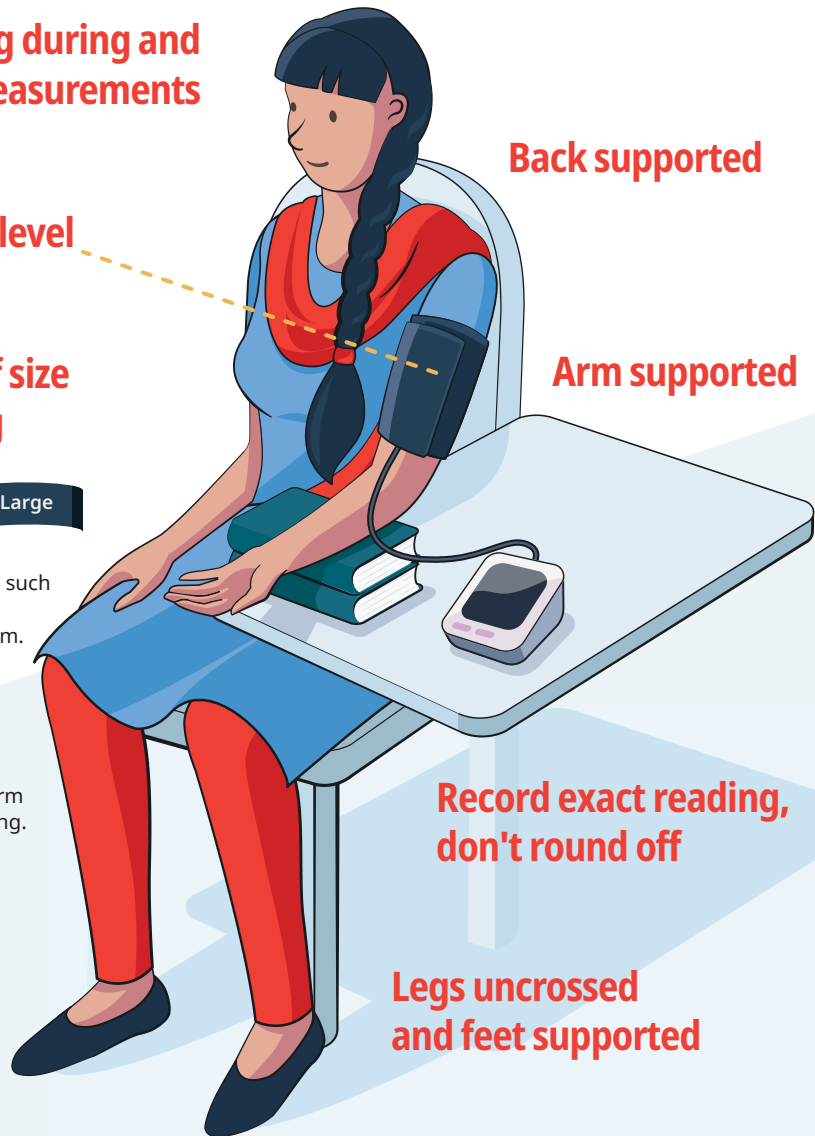
3. Ensure cuff is on bare arm or over thin layer of clothing. Avoid bunching of clothes under cuff.

Arm supported

Record exact reading, don't round off

Legs uncrossed and feet supported

Ensure the person has not exercised, had tea/coffee, or used tobacco in the last 30 minutes
Person should rest comfortably and quietly for 5 minutes before the reading



Hypertension treatment

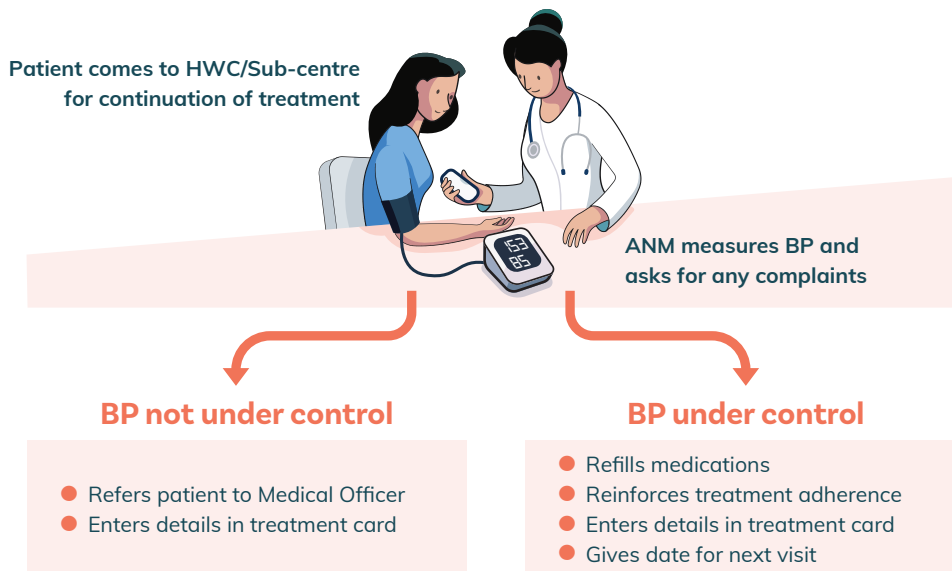
Treatment of hypertension is simple, and medicines are available free from government health facilities. Almost all patients will require medication to control high BP—lifestyle change is usually not sufficient.

- Treatment is initiated by the medical officer at the PHC and the patient is advised to come for monthly follow-ups.
- Once the BP is at target value, the patient is advised to follow up at the HWC/sub-centre closer to their house for monthly check-ups of BP and for collecting medicines for a month.



The treatment goal is
Systolic BP < 140 mmHg
AND
Diastolic BP < 90 mmHg

Patient flow at HWC/Sub-Centre



Counselling on treatment adherence

To keep BP at a safe and healthy level, patients must take daily medication for the rest of their lives. Patients can be reluctant to commit to taking medication every day and struggle to take medication regularly for a disease with no symptoms. But BP will increase again if the patient stops treatment. Health care workers have an important role in helping patients understand the risks of high BP, and supporting them to take medications consistently.

To ensure the patient takes medicine every day, the health care staff should develop a good relationship with patients. Provide positive feedback and praise if the patient is taking medicine every day. Avoid criticizing people who do not take medicine every day and instead show empathy, try to understand the patient's reason for not taking medication regularly, and look for solutions.



Health care staff should ensure there is no interruption in the supply of medications.

COUNSELLING TO PATIENTS SHOULD STRESS THE FOLLOWING POINTS:

- High BP is very dangerous. Even though a patient does not feel sick, high BP can harm the organs and cause heart attack, stroke, kidney disease, and death.
- Patients can control high BP and protect themselves from heart attack and stroke by regularly taking medication and returning to the clinic for follow-ups.
- Taking medication regularly is the most important thing a patient can do to control high BP. Even if the patient feels fine, they should NEVER stop a medication without consulting a doctor. There is a difference between medicines for long-term control (as in hypertension) and medicines for quick relief (such as for headaches). Taking the proper dose of BP medication at the same time each day can save the patient's life.
- To ensure regularity, the patient should:
 - Take medication after certain regular activity. For example, every morning after brushing teeth;
 - Keep a sufficient supply of medications at home till next visit to health facility;
 - Use memory aids, such as notes, weekly pillboxes, alarms and smartphone applications.

Lifestyle management advice

Lifestyle changes are important, but **they are not enough to control high BP**. Some lifestyle changes can help patients with high BP when undertaken along with medication.



Avoid tobacco and alcohol



Reduce salt under 1 tsp/day



Eat 4-5 servings of fruits & vegetables



Important: Check the patient's understanding before the patient leaves the health centre

Retrieval of patients who missed visits

Staff should develop a system for follow-up with patients through phone, home visits and other methods. Every month, ANM should check if all the patients came for follow-up visits either at the HWC or subcentre. If any patient has not come for

follow up, a phone call or home visit should be made. The reason for not following up should be noted and the patient should be counselled to come back for follow-up visits regularly.

Recording and reporting

Patients registered at the health facility for treatment of hypertension are issued a **BP passport**. Patients should bring this along during follow-up visits. On the day of the visit, the health care worker attending the patient, gives the date of the next visit. This is written on Page 1 of the BP passport. The BP value and drugs prescribed on the day of follow up is written on Page 2. Patients are advised to bring the BP passport every time they visit the health facility for follow up.

The patient **hypertension treatment card** is initially filled at the Primary Health Centre (PHC). The medical officer will write the initial medicines and update the card whenever there is a change in medications.

In facilities using the **Simple app**, the entry is made in the app and updated at each follow-up visit. At the HWC/sub-centre, the ANM will maintain a copy of the IHCI hypertension treatment card or follow-up register and enter the details of patient follow up visits. At the end of the month, the ANM will send a monthly report of patient follow-ups and missed visits to the PHC staff nurse.

Hypertension and Diabetes Treatment Card (This card for every patient given or prescribed medicines to treat hypertension and diabetes, regardless of response)

Patient name _____ Registration date _____ Patient ID number _____

Age _____ DD MM YY 00001 00002 00003 _____

Gender Male Female Transgender

Health facility _____

District _____

Full address _____

House number, Name of household/area/colony (if shared address) _____

Nearest subcenter _____

Phone number _____

Other phone no. _____

Other ID number _____

Already on medication for hypertension? Yes No

Already on medication for diabetes? Yes No

Past history of heart attack? Yes No

Past history of stroke? Yes No

Past history of kidney disease? Yes No

Important: When BP is ≥ 140 or ≤ 90 , escalate treatment as per IHCI protocol

At registration

Treatment date DD MM YY

Blood pressure

Blood sugar

Treatment dose Please write dose

Amlodipine _____

Telmisartan _____

Chlorthalidone _____

Hydrochlorothiazide _____

Enalapril _____

Losartan _____

Aspirin _____

Statins _____

Metformin _____

If a patient misses a visit, please contact promptly to return to care

Date contact attempted	Date contact attempted	Date contact attempted	Date contact attempted	Date contact attempted
<input type="radio"/> No response	<input type="radio"/> No response	<input type="radio"/> No response	<input type="radio"/> No response	<input type="radio"/> No response
<input type="radio"/> House not found	<input type="radio"/> House not found	<input type="radio"/> House not found	<input type="radio"/> House not found	<input type="radio"/> House not found
<input type="radio"/> Agreed to return	<input type="radio"/> Agreed to return	<input type="radio"/> Agreed to return	<input type="radio"/> Agreed to return	<input type="radio"/> Agreed to return



