



**CHIRI**

**Controlling Hypertension in  
Rural India**

**Meeting # 1**

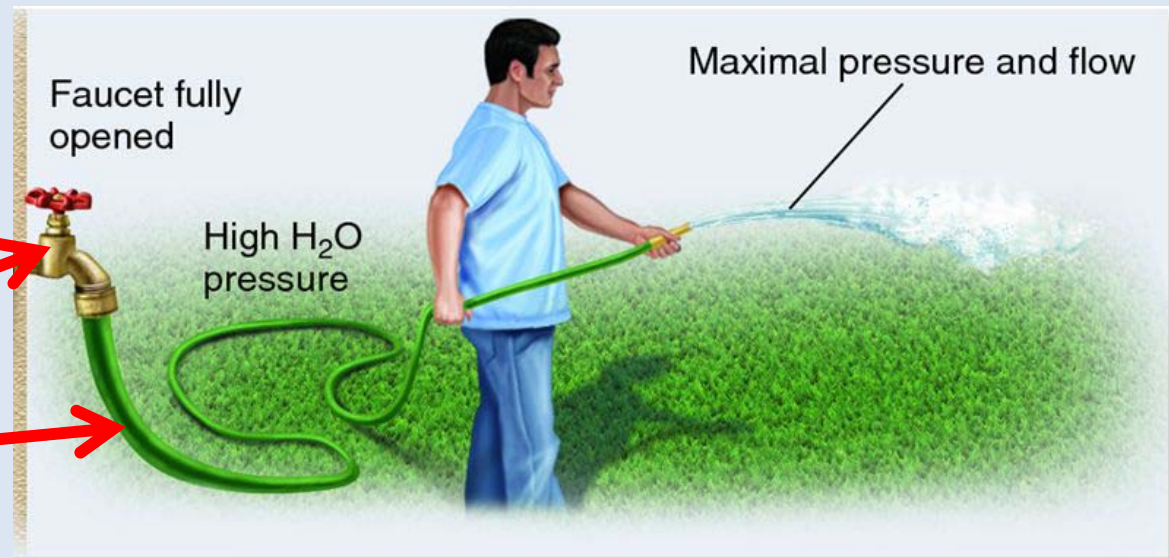
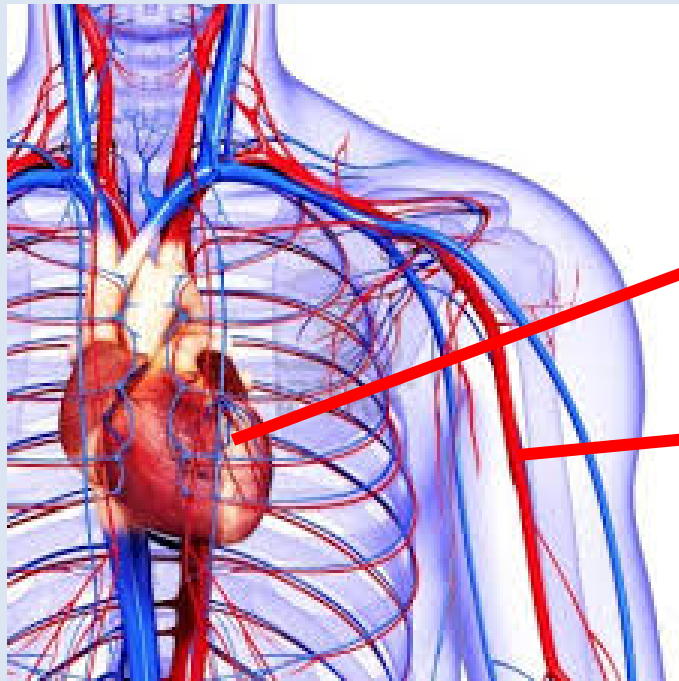


# What is blood pressure? What is Hypertension?



- Namaste, today I will talk to you about hypertension. What it means, how is it caused and how can we prevent and control it.

# What is blood pressure?



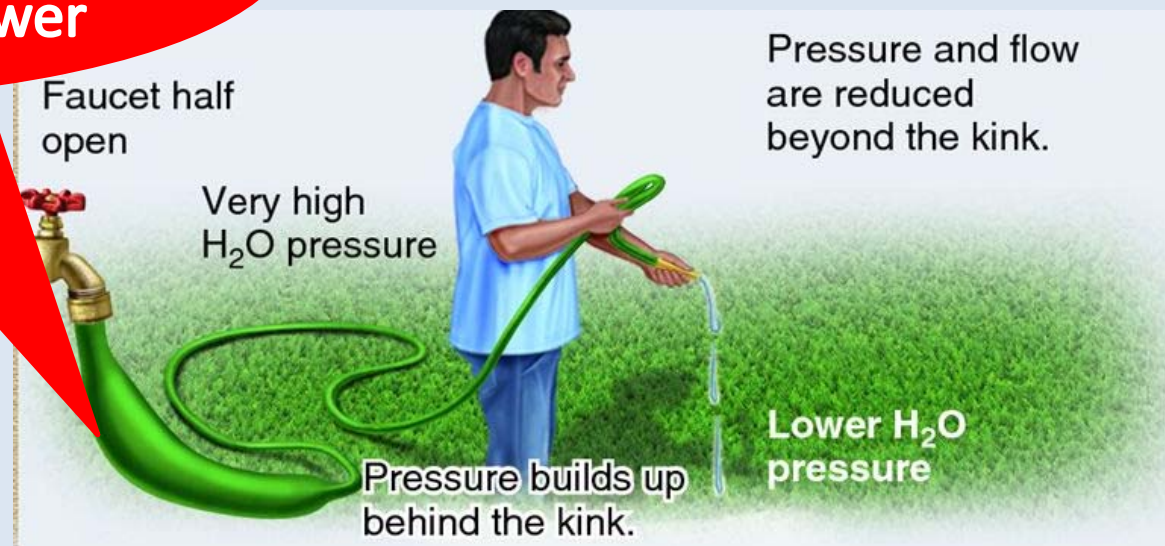
**Normal Blood Pressure  
is less than 120/80**



- Oxygen is pumped to our muscles and vital organs when our heart beats.
- The force that the blood is pumped around our body is called the blood pressure
- In this picture you can think the tap represents our heart and the arteries which take oxygen around to all our muscles is like the hose
- Blood pressure is the pressure with which blood flows in our bodies, like the pressure of the water through a hose
- Normally, this pressure is below 120 by 80 mm of Hg.
- The harder our heart has to work to pump our blood around the higher our blood pressure

# High Blood Pressure

The pressure behind the kink builds up and the flow of blood is slower



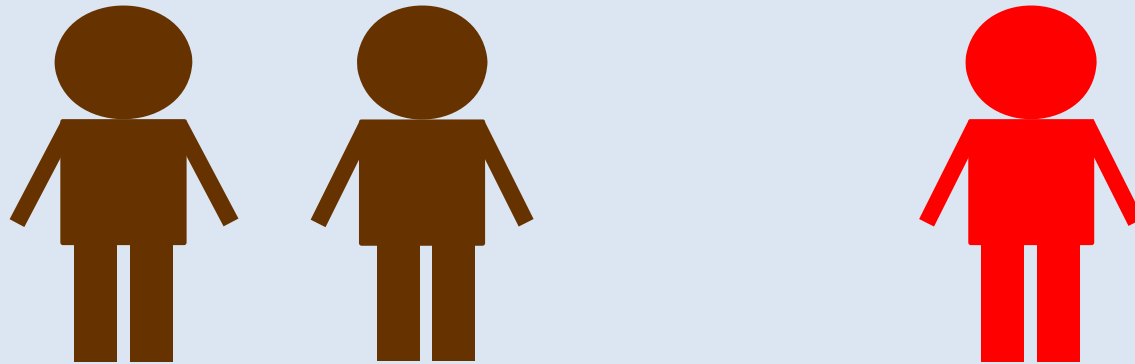
**High Blood Pressure  
is more than 140/90 mm of Hg**



- Think about what happens when our hose gets a kink in it or something is blocking the flow of the water.
- The pressure behind the blockage builds up and the tap has to be turned on harder for the water to get through.
- This can happen in high blood pressure and the force needed to pump our blood around our body needs to be much higher
- Sometimes, our BP increases to a level above 140/90mmHg, this is called High blood pressure or hypertension
- We will talk about a few of the reasons for this today
- Sometimes when your doctor measures your BP it may be a bit high (you might have been running to get to the doctor on time)
  - you need to get your BP measured a few times before you can be told you have high BP

# High Blood Pressure

Blood Pressure  
more than  
140/90 mm of Hg



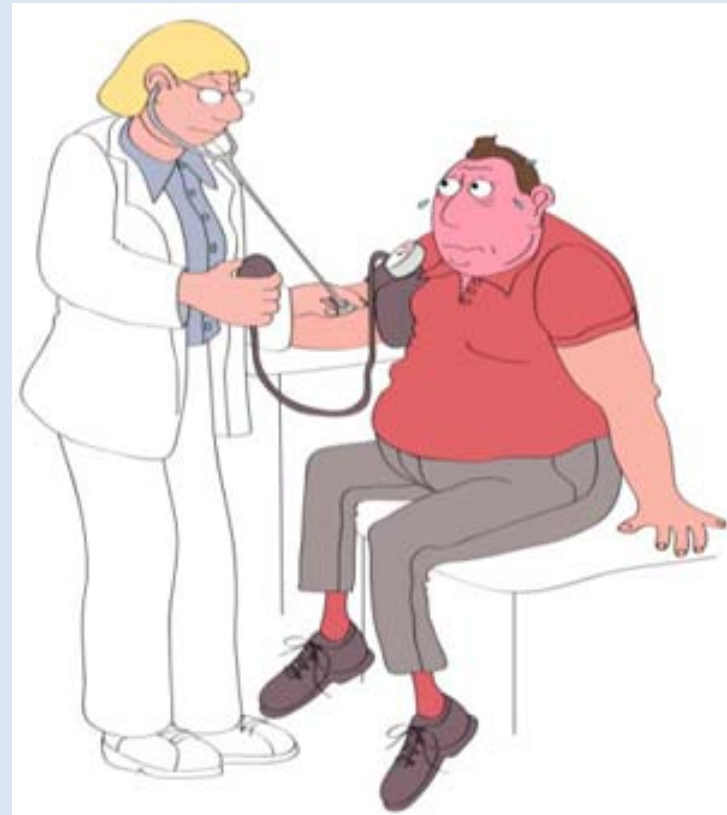
One out of every 3 people in  
India will have high blood  
pressure





- High BP is becoming a big problem in India and other countries. One in every three people will have high BP in India on average.
- Some areas in which this project will be carried out may have fewer people with high BP but other areas may have more people with high BP.

# High Blood Pressure is a silent killer



- When the blood pressure is high you may have headache, palpitation, fatigue, dizziness or blurred vision but usually you don't have symptoms
- It is a silent killer as no one knows what their BP is until they get it checked and in some cases, the first time it is checked is what they have a heart attack or stroke
- It is a chronic disease – this means that once you have hypertension, you will have it for the rest of your lives and need to take medicines regularly

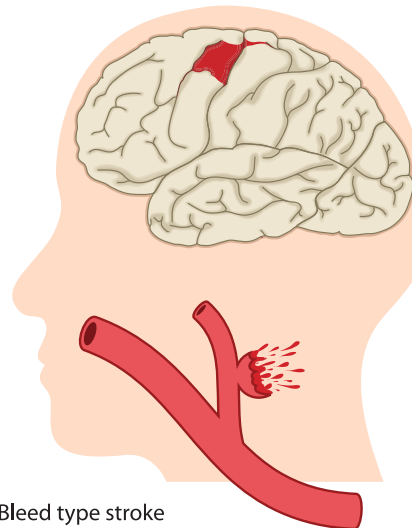
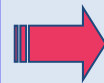
# High Blood Pressure can cause cardiovascular disease



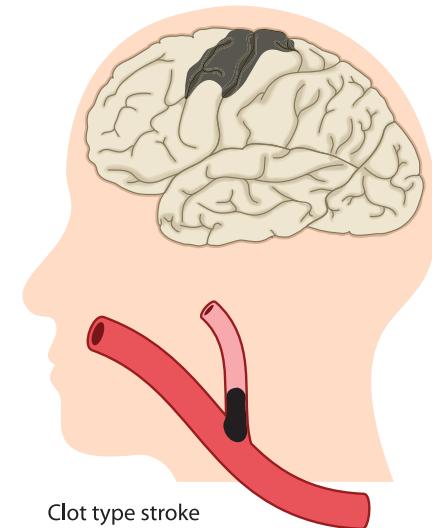
**Heart Attack**



**Stroke  
(Paralysis)**



Bleed type stroke



Clot type stroke



- Hypertension is dangerous because it can cause very serious health problems like heart attack and stroke.
- Heart attack occurs when one of the arteries supplying the heart muscle gets blocked causing that part of the heart to die.
- Stroke occurs when blood supply to a part of the brain is cut off due to a block in the artery or if an artery ruptures/bursts.
- High blood pressure also causes kidney damage

# Symptoms of Heart Attack

Chest discomfort



Arm or back discomfort



Neck or jaw discomfort



Trouble breathing,  
with or without  
chest discomfort



Feeling light-headed or breaking  
into a cold sweat



Feeling sick or  
discomfort in  
your stomach



- The symptoms of heart attack are:
  - Uncomfortable pressure, fullness, burning, or heavy weight, squeezing or pain in the center of the chest
  - Location of pain - chest, upper abdomen, neck, jaw, or inside the arms or shoulders
  - Lightheadedness, fainting, sweating, nausea or shortness of breath

# Symptoms of Stroke or Paralysis



**F** **ACE**  
HAS THEIR FACE FALLEN ON ONE SIDE?  
CAN THEY SMILE?



**A** **RMS**  
CAN THEY RAISE BOTH ARMS AND  
KEEP THEM THERE?



**S** **PEECH**  
IS THEIR SPEECH SLURRED?





- **The symptoms of stroke are:**
  - **A numbness or weakness in the face, arm or leg**
  - **Trouble speaking or understanding**
  - **Unexplained dizziness**
  - **Blurred or poor vision in one or both eyes**
  - **Headache (usually severe or of abrupt onset) or unexplained change in the pattern of headaches**
  - **Confusion**
  - **Unconsciousness**
  - **Sudden nausea, vomiting**

# Risk Factors



- High blood pressure is caused by a number of factors.
- Some of these factors cannot be controlled – these are your age, if your parents had high blood pressure or heart disease.
- But, there are some factors which can be changed – these are
  - being overweight/obese
  - eating unhealthy food e.g. lot of fried or oily foods
  - too much salt
  - Drinking alcohol
  - Smoking/chewing tobacco.
  - not exercising enough

# Managing your hypertension



- The good news is that hypertension can be controlled and heart attacks and stroke can be prevented.
- You can do this by eating healthy food this means
  - Eat foods low in fat and sugar
  - Reduce how much salt you use
  - Eating more fresh fruits and vegetables, especially green leafy vegetables
- Stop tobacco use and alcohol in any form
- Increase physical activity
- And if you have hypertension, you can manage it well by taking your medicines regularly without fail
- Getting your BP measured regularly



# Why balanced diet?

(Eat to live, not live to eat)



- It is important to eat a balanced diet
- We will discuss diet and nutrition at the fourth meeting but these are the main messages
  - Avoid ghee/butter and use less oil for cooking
  - Reduce the amount of salt per person per day in the food.
  - Restrict the amount of sweets and deep fried foods
  - Do not add extra salt
  - Eat Legumes like green gram, channa, cow pea, green peas etc are good substitutes for meat
  - Soya beans may be especially beneficial to the heart (substitute for animal protein)
  - Eat sprouts, green leafy vegetables and fresh fruits and vegetables
  - Unhusked wheat and pulses are rich in minerals and vitamins. They are also rich in fibre and lower cholesterol.



**Quit tobacco to help  
lower your BP and  
prevent other disease**





- Tobacco in all forms – bidis, cigarettes, tambakoo, cigars, is extremely dangerous, not only for heart health, but for all other organs of the body!
- It causes high blood pressure, heart attack, stroke, cancer, and other lung diseases.

# No or low alcohol



- Alcohol causes your heart rate and blood pressure to increase
- Cause loss of water and dehydration
- Blurred vision and loss of behaviour control



# Be Physically Active for 30 minutes everyday



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- We will talk more about physical activity in the later meetings but the main message is must aim to exercise at least 30 minutes a day for most days a week.
- There are lots of active things to choose from - you can choose to go for a walk, run, cycle, do yoga, play cricket



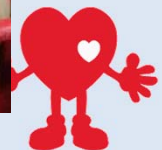


- Spending time with your family is healthy and fun but this time should be spent being active.
- Walk, run, play games together laugh and talk to each other
- Sitting around watching the TV together is not very healthy and can teach bad habits to your children

# Visit your health care provider for prevention and early treatment



High blood pressure can be prevented and managed





- Visit your health care provider for prevention and early treatment as high blood pressure can be prevented and managed by simple steps
- If you have high blood pressure remember to
  - take your medications at the times that your doctor tells you to take them
  - get your BP checked regularly by your doctor as your medications may need to be changed according to your BP reading.
- Talk to your ASHA, ANM, doctor.

# 5 Rules for Lower Blood Pressure



**Rule 1. Avoid excess fats, oils and salt**



**Rule 2. Eat more fresh fruits and vegetables**



**Rule 3. Quit tobacco and alcohol**



**Rule 4. Be Physically Active**



**Rule 5. Check your BP regularly**



## Follow the 5 golden rules for a healthy heart

1. Avoid excess use of fats, oils, salt and sweets in your diet
2. Eat more fresh fruits and vegetables
3. Quit alcohol, smoking and all other forms of tobacco
4. Exercise regularly
5. Visit your doctor regularly, especially if you have a family history of heart disease



## Causes of Hypertension



BP  
>140/90mmHg



- This take home sheet will remind you of the risk factors associated with hypertension and those things you might change with the help of your family and this group to help manage your hypertension better



# Low Sodium Choices

## Fruits



## Vegetables



## Grains



## Meat/Fish/Poultry/Beans
























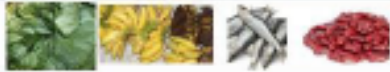



















## Dairy/Flavors



- This sheet shows you some pictures of better choices you might make when trying to reduce your salt intake



### Weekly self-management diary

Week 1	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
							
Medicines as told 	 	 	 	 	 	 	 
30 mins activity 							
Record if you actively reduced your salt intake 							
Record if you did not have tobacco or reduced 							
Record if you did not drink 							
WEEK 2  Visit HCP?	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Day 14
							
Medicines as told 	 	 	 	 	 	 	 
30 mins activity 							
Record if you actively reduced your salt intake 							
Record if you did not have tobacco or reduced 							
Record if you did not drink 							

How was my week?

Use this space to record any difficulties you had

How was my week?

Use this space to record any difficulties you had



- This is your weekly monitoring chart to take home.
- Make a tick in the box if you are able to do some of the things in your list,
  - like eat some more fruit and vegetables than you normally would
  - Do some activity
  - Reduce smoking and tobacco use
  - Take some time to relax
  - Take your medications as told to by your doctor
- The more ticks you are able to enter then you're doing great, but be honest with yourself