



Hypertension

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Hypertension

- Blood pressure levels are a function of cardiac output multiplied by peripheral resistance (the resistance in the blood vessels to the flow of blood)





Hypertension

Category	Systolic Blood Pressure	Diastolic Blood Pressure
Normal	< 120	<80
Pre-hypertension	120-139	80-89
Hypertension – Stage 1	140-159	90-99
Hypertension – Stage 2	≥ 160	≥ 100

Factors Influencing the Development of Hypertension

- High-normal blood pressure
- Family history of hypertension
- African-American ancestry
- Overweight
- Excess Consumption of Sodium Chloride
- Certain segments of the population are 'salt sensitive' because their blood pressure is affected by salt consumption



Factors Influencing the Development of Hypertension

- Alcohol consumption
- Exercise
- Less active individuals are 30-50% more likely to develop hypertension.
- Other Dietary Factors
- Potassium:
- Calcium:
- Magnesium:



Signs and Symptoms

- Some symptoms include:
 - Severe headache
 - Shortness of breath
 - Nosebleeds
 - Severe anxiety
- Signs:
 - Elevated BP on consecutive readings



Treatment for Hypertension

- Maintain a healthy weight, lose weight if overweight.
- Be more physically active.
- Drink alcoholic beverages in moderation.
- Reduce the intake of salt and sodium in the diet to approximately 2400 mg/day.



Treatment for Hypertension

Drugs for Hypertension

- Diuretics
 - Thiazide
 - Loop diuretics
 - Aldosterone antagonists
 - K-sparing
- Adrenergic inhibitors
 - Peripheral agents
 - Central (α -agonists)
 - α -blockers*
 - beta-blockers
 - Alpha+beta-blockers
- Direct Vasodilators *
- Calcium channel blockers
 - Dihydropyridine
 - Non dihydropyridine
- ACE-inhibitors
- Angiotensin-II blockers
 - * *Usually not monotherapy*



Nursing care

- 1. Nursing care for patients with hypertension focuses on lowering and controlling the blood pressure
- 2.. Nurse's role is to support and educate the patient about treatment regimen
- 3.. making lifestyle changes and taking medications as prescribed (antihypertensive)



Nursing care

- 4..measures blood pressure routinely
- 5.. maintains pulse rate and rhythm and respiratory rate with normal range
- 6.. maintains urine output consistent with intake



THANK
YOU