

## W.U.S. HEALTH CENTRE UNIVERSITY OF DELHI DELHI-110007

Ph.: 27666257 27667908, 27667725/1660

WORLD HEALTH DAY

: 7<sup>th</sup> April, 2013

THEME OF THIS YEAR'S WORLD HEALTH DAY: Silent killer, global public healthcrisis

Slogan

: "Healthy Heart Beat, Healthy Blood Pressure"
"Control your blood pressure, control your life"

Blood Pressure (BP):

Blood pressure is the force of blood against the inside of blood vessels. It is created by the pumping of the Heart. Normal levels of both systolic and diastolic blood pressure are particularly important for the efficient functioning of vital organs: Heart, Brain and Kidney.

#### High blood pressure:

High blood pressure (Hypertension) increases the risk of fatal Heart Attacks, debilitating Strokes, Kidney Failure, Blindness, Irregularities of the Heartbeat, Heart Failure, Premature Death.

The risk of developing these complications is higher in the presence of other cardiovascular risk factors such as Diabetes. 1 in 10 people in their 20s and 30s, more than 1 in 2 adults in their 50s worldwide has high BP.

Prevention and treatment of Hypertension together with other cardiovascular risk factors, has brought about a reduction in deaths from Heart disease and prevention of Heart attack and Stroke.

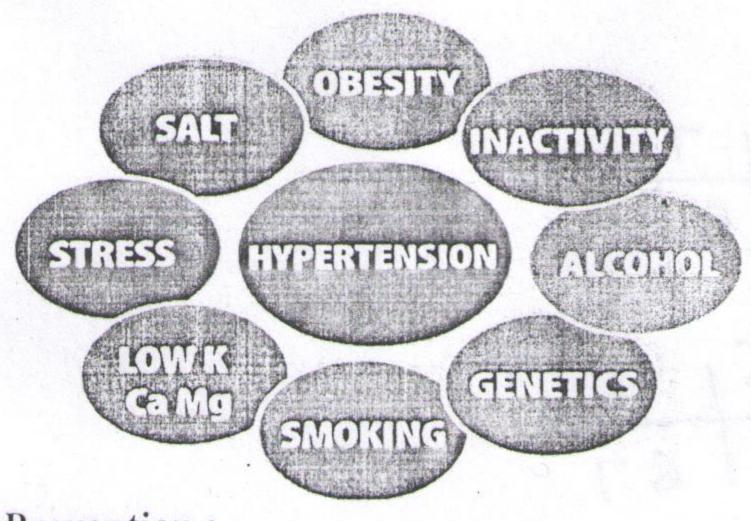
#### Symptoms:

Hypertension is generally a silent condition. Symptoms of severe hypertension can include:

Headaches, Shortness of breath, Nosebleeds, Flushing, Dizziness, Chest pain, Visual changes, Blood in urine.

These symptoms require immediate medical attention.

#### Causes of Hypertension:



#### Prevention:

High blood pressure is both preventable and treatable. High Blood Pressure can be minimized by:

Reducing salt intake particularly in processed food; eating a balanced diet; avoiding harmful use of Alcohol; taking regular physical activity; maintaining a healthy body weight; Avoiding Tobacco use.

Exercise; Medication; Limit fatty foods; manage Cholesterol; reduce Stress.

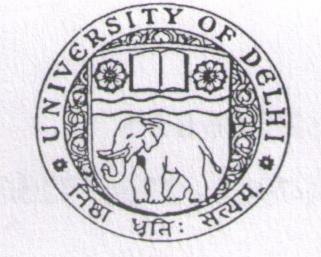
For many people, lifestyle changes are sufficient to control blood pressure. For others, medication is required. It is essential that detection and control of high blood pressure (measurement, health advice and treatment) are coupled with simultaneous reduction of other risk factors that cause Heart Attacks and Strokes, such as Diabetes and Tobacco use. They should be core elements of Primary Health Care.

#### Investigations: Investigation of all patients:

Urinalysis for Blood, Protein and Glucose, Blood Urea, Electrolytes and Creatinine, Blood Glucose, Serum total and HDL Cholesterol, 12-lead ECG.

#### Investigation of selected patients:

Chest X-Ray PA View, Ambulatory BP recording, Renal Ultrasound, Renal Angiography, Urinary Catecholamines, Urinary Cortisol and Dexamethasone Suppression Test, Plasma Renin activity, Aldosterone.



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### Treatment of Hypertension:

Favourable Effects on Comorbid Conditions	Drug
Angina	Beta blocker, CCB
Atrial tachycardia and	Beta blocker CCB
fibrillation	(Non-DHP)
Cough from ACE inhibitor	ARB
Diabetes mellitus,	ACEI, ARB, Low-
particularly with	dose Diuretic, CCB,
proteinuria	Beta blocker
Dyslipidemia	Alpha blocker
Essential tremors	Beta blocker (non-CS)
Heart failure	ACEI, ARB,
	Carvedilol, Beta
	blocker, Diuretic
Hyperthyroidism	Beta blocker
Migraine	Beta blocker (non-CS). CCB
Osteoporosis	Thiazide
Preoperative hypertension	Beta blocker
Previous Myocardial	Beta blocker, ACEI,
Infarction	ARB
Prostatism	Alpha blocker
Renal insufficiency	ACEI, ARB, loop diuretic
Systolic hypertension in old	

Unfavourable Effects on Comorbid Conditions	Drug
Bronchospasm	Beta blocker
Second or third-degree Heart Block	Beta blocker, CCB (non-DHP)
Depression	Central alpha- adrenergic agonist, reserpine #
Dyslipidemia	Beta blocker (non- ISA), Diuretic (high- dose)
Gout	Diuretic
Heart failure	CCB*
Hyperkalemia	ACEI, ARB, DRI, aldo blocker
Liver disease	Labetalol, Methyldopa#
Peripheral Vascular Disease	Beta blocker*
Pregnancy	ACEI#, ARB#, DRI#
Renal insufficiency	Potassium-sparing diuretic, Aldosterone blocker*
Renovascular disease, bilateral	ACEI, ARB, DRI
Types 1 and 2 Diabetes	Beta blocker, high- dose diuretic

CCB = Calcium Channel Blocker, non - DHP = Non-Dihydropyridine, ARB = Angiotensin Receptor Blockers, ACEI = Angiotensin Converting Enzyme Inhibitor, non-CS = non-Cardioselective, non-ISA = non-Intrinsic Sympathomimetic Activity, DRI = Direct Renin Inhibitors.

(Dr. Sunil)

Chief Medical Officer

<sup>\*</sup>These drugs may be used with special monitoring unless contraindicated; # Contraindicated.