

Pregnancy Induced Hypertension and Pre-eclampsia in Women



**ICON HEALTH
PHYSIO & HOMECARE
CLINIC**

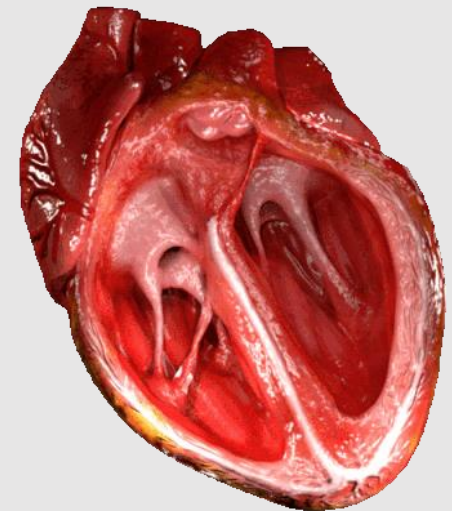


**By:
ICON HEALTH SYSTEM**



OUTLINE

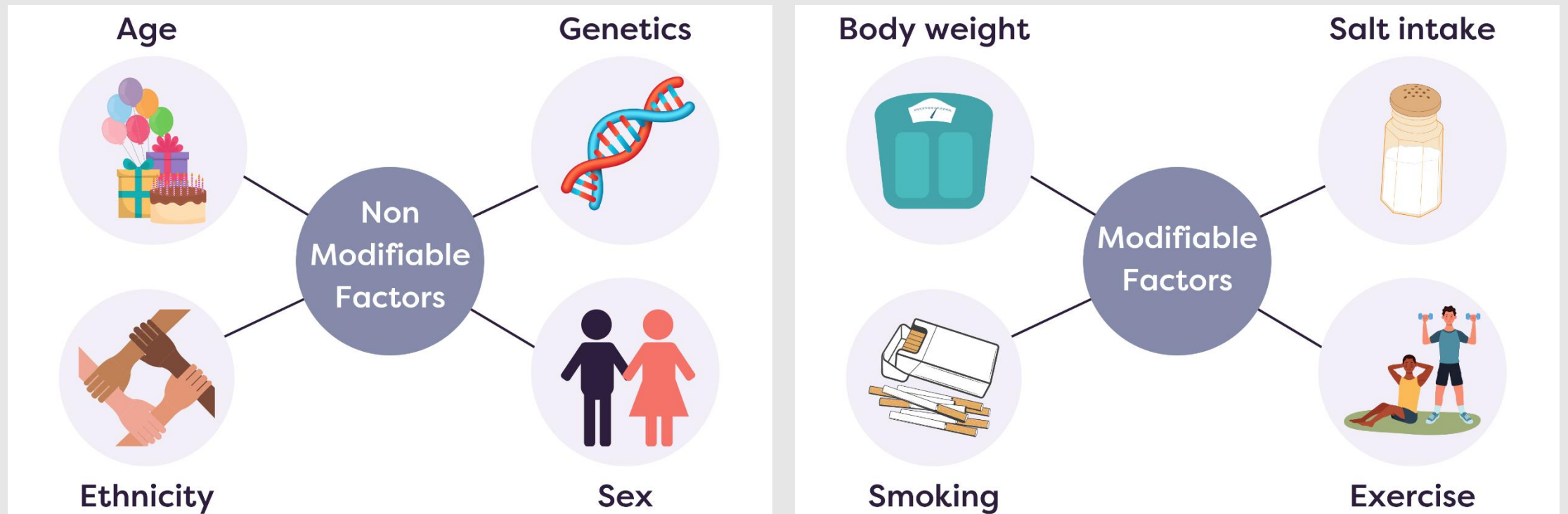
- GENERAL OVERVIEW OF HYPERTENSION
- RISK FACTORS
- PRE-ECLAMPSIA AND PREGNANCY INDUCED HYPERTENSION
- WOMEN AT RISK
- COMPLICATIONS
- INTERVENTIONS



OVERVIEW

- Hypertension (HPT) is defined as blood pressure above 140/90mmHg and its considered highly severe if the pressure is above 180/120mmHg. New recommendations identify 130/85 mmHg as high normal and 160/100 as hypertensive crisis.
- In simple terms, blood pressure (BP) is the force with which blood flows through its major vessels in the body.
- Hypertension, is one of the leading causes of morbidity and mortality rate in Ghana and the world at large, and the rate at which individuals are getting this disease condition is becoming very alarming.

RISK FACTORS OF HYPERTENSION



RISK FACTORS OF HPT AS A WOMAN



PRE-ECLAMPSIA AND PREGNANCY INDUCED HYPERTENSION (PIH) IN WOMEN

- Pregnancy changes a lot about the makeup of the woman (including her heart).
- The heart of a pregnant woman works harder as compared to the heart of a woman who is not pregnant.
- This is because, the heart of a pregnant woman is now forced to pump harder to supply her greater body mass as she gains weight and also, supply blood to the fetus which is growing bigger by the day and needs more blood to survive.

PRE-ECLAMPSIA AND PIH IN WOMEN

- Blood flow to her breast and skin also increases tremendously, and all these changes usually put a serious strain on the heart.
- These demands then lead to a rise in BP in most women especially in the last trimester.
- ***WHAT THEN DO WE KNOW ABOUT PRE-ECLAMPSIA AND PREGNANCY INDUCED HYPERTENSION ?***

PRE-ECLAMPSIA AND PIH IN WOMEN



- **Pre-eclampsia** is simply the rise in blood pressure (BP) of a pregnant woman.
- It is associated with the leakage of proteins, (**Proteinuria**) in the urine.
- If BP rises in pregnancy without proteins being leaked into the urine, it is termed as **Pregnancy Induced Hypertension**.

PRE-ECLAMPSIA AND PIH IN WOMEN



- When high BP's are not managed properly for long, it can have effects on the kidneys, and in the case of Proteinuria in Pre-eclampsia, it is characterized by a reduction in renal perfusion and damage to the glomerular basement membrane, thereby resulting in a leakage of proteins in urine.

PRE-ECLAMPSIA AND PIH IN WOMEN



- This complication occurs in about 3-7% of pregnant women in their 20th week of pregnancy and usually before the end of the 1st week after delivery. Women with pre-existing high BP are six times more likely to develop pre-eclampsia.

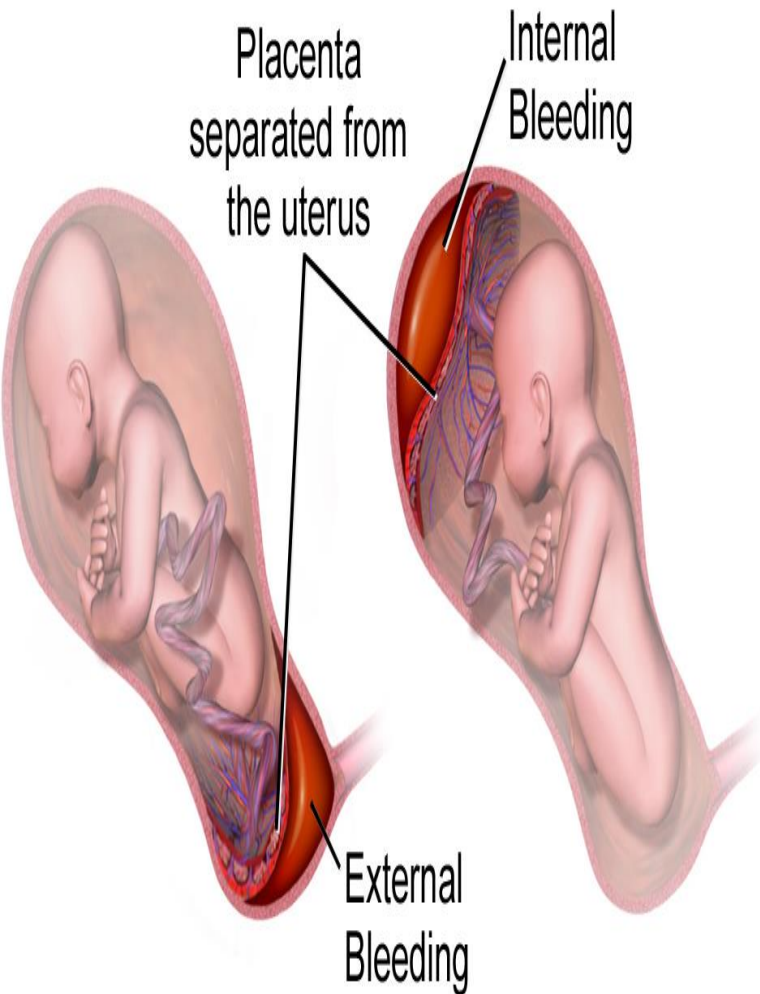
WOMEN AT RISK OF PRE-ECLAMPSIA AND PIH

- ❖ Any pregnant woman can be at risk of pre-eclampsia. However, the following women have higher risk.
 - Women who have not put to birth before (Nulliparity)
 - Those who have experienced pre-eclampsia before
 - Family history – if your mum or close relative has had it before
 - New partner – if the man responsible for the new pregnancy is different from the father of your other kids
 - Prolonged pregnancy – lasting beyond nine months

WOMEN AT RISK OF PRE-ECLAMPSIA AND PIH

- Obesity in women
- Women who drink or smoke
- Increasing maternal age –when you get pregnant near menopause
- Pre-existing hypertension – if you have high BP already
- Women with diabetes
- Those with multiple babies in their womb

COMPLICATIONS OF PRE-ECLAMPSIA AND PIH



- Pre-eclampsia is usually without symptoms, however if it is not detected early, it may result in premature detachment of the placenta from the uterus (womb).
- Babies born by women with this condition can develop problems such as small birth weight, jaundice and under-nutrition among the lot.
- Pre-eclampsia can also generate to eclampsia.

COMPLICATIONS OF PRE-ECLAMPSIA AND PIH

HELLP SYNDROME

during pregnancy

HELLP syndrome is often considered to be a variant of **preeclampsia**. However, although HELLP syndrome and preeclampsia are closely linked, it's possible for an expectant mom to have HELLP syndrome without high BP or certain aspects of preeclampsia.

Characteristics of HELLP include:

H

HEMOLYSIS

This means that red blood cells are broken down too quickly. This can lead to anemia, a problem involving insufficient transport of oxygen throughout the body.

EL

ELEVATED LIVER ENZYMES

This can be taken as a sign that liver function is compromised.

LP

LOW PLATELET COUNT

Platelets help with blood clotting, so an unusually low level of platelets indicates that a person is at risk for excessive bleeding.

- Mothers could develop swollen feet and hands, dotted skin, headaches (that cannot be relieved with paracetamol), distorted vision, confusion, abdominal pain, vomiting, difficulty in breathing etc.
- Pre-eclampsia can also progress into a condition known as the HELLP (Haemolysis, Elevated Liver enzymes, Low Platelet count) syndrome, a dangerous complication of blood flow.



INTERVENTIONS

EARLY DETECTION AND CONTROL OF HIGH BP IN PREGNANCY

- It is necessary to make a conscious effort to monitor your BP's regularly when pregnant.
- This is because during the 2nd trimester, your BP is likely to drop low and begin to rise in the 3rd trimester. So, you don't have to stop monitoring your BP throughout your pregnancy period.
- When High BP's are detected, do not self medicate, always consult your physician to prescribe appropriate medications that will suit you

MEDICAL MANAGEMENT

- It is not easy to detect pre-eclampsia;
- Once pre-eclampsia is detected, regular maternal checkup is very important in ensuring the safety of you and your unborn child.
- Usually, your doctor may prescribe labetalol and nifedipine when your systolic BP is >160 .
- Antihypertensive like parenteral hydrazaline
- When at risk, it is best to not self diagnose, but rather talk to your healthcare professional.

DIETARY INTERVENTION.

- Our choices of foods and beverages have great effects on our hearts, organs and body. By controlling **what we eat, when we eat, how much we eat and how often we eat**, we significantly improve upon our health.
- In managing high BP's in pregnancy with diet, each individual must first be assessed, so that, an intervention can be developed for each individual. This is because, the severity of one person's condition will be different from the other person, hence the need for different interventions.

DIETARY INTERVENTION

- It is important to adhere to the following in the management of hypertension in pregnancy;
 - Reduce consumption of excessive sodium and sodium rich foods
 - Limit consumption of canned and spicy foods
 - Reduce consumption of saturated fats, trans fat, and high cholesterol diets as this also contributes to high BP levels
 - Limit consumption of caffeinated foods and beverages as this increases stress due to sleeplessness

DIETARY INTERVENTION CONTD.

- Choose fresh foods over processed foods
- Increase consumption of potassium rich foods but knowing the quantity to take with respect to your lab results
- Increase consumption of high fibre foods such as; fruits, vegetables, nuts, seeds, legumes, cereals etc.
- Use MUFA and PUFA instead of SFA
- Adopt other cooking methods other than frying to reduce quantity of oil consumed daily. Other methods such grilling, boiling, poaching, steaming etc.

EXERCISE

- If you want to live a long, good, and healthy life, it is necessary to engage in regular physical activities or exercises. Some benefits of exercise include:
- Lowers your BP by about 10-20mmHg when done consistently
- Increases your HDL while lowering your LDL
- Releases stress, which is a precursor of high BP
- Reduces body weight hence handling obesity and associated problems, which are risk factors of pre-eclampsia



- As a pregnant woman, some exercises that can be recommended include;
 - Walking – Brisk walking
 - Dancing
 - Stair climbing etc.
 - It is also important to practice meditation and take rest in order to be relieved of stress, to help lower the risk of pre-eclampsia and pregnancy induced hypertension.



**Always remember knowledge is power. It is therefore
essential to be aware, to prevent certain conditions,
rather than looking for a cure. Lets try to take our health
serious and be responsible for our own wellbeing and
that of those around us.**



THANK YOU

ANY QUESTIONS???