



NYU Grossman School of Medicine

Project ADHERE

Blood Pressure Education Program

Session 5: Heart Disease and Risk Factors (HTN+RD)

Addressing Disparities in Hypertension and Reducing Racial inequity through Engagement

As of January 30, 2023

Objectives

- Understanding heart disease and its risk factors
- Learning the warning signs of a heart attack and a stroke

Session 5 Overview

- Last session we discussed physical activity as a way to manage blood pressure
- Today we will focus on learning a little more about heart disease and its risk factors, heart attack and stroke.

Heart Disease among African Americans

- Heart disease is the leading cause of death for all Americans, but certain minority groups face a greater risk than others.
 - Hypertension (High Blood Pressure) is a major risk factor for heart disease
- Deaths from heart disease are higher in Black Americans than in White Americans and other ethnic groups. It also develops at a younger age in African Americans.
- Nearly 48% of African American women and 44% of African American men have some form of heart disease.

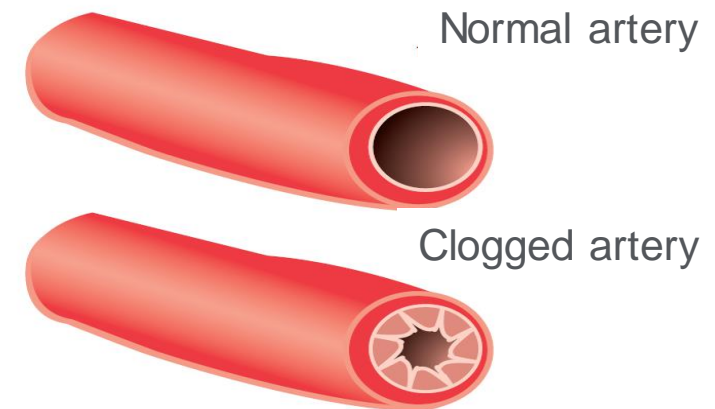
Heart Disease and African Americans

Below are the percentages of all deaths caused by heart disease in 2021, listed by ethnicity, race, and sex.¹

Race of Ethnic Group	% of Deaths
American Indian or Alaska Native	15.5
Asian	18.6
Black (Non-Hispanic)	22.6
Native Hawaiian or Other Pacific Islander	18.3
White (Non-Hispanic)	18.0
Hispanic	11.9
All	17.4

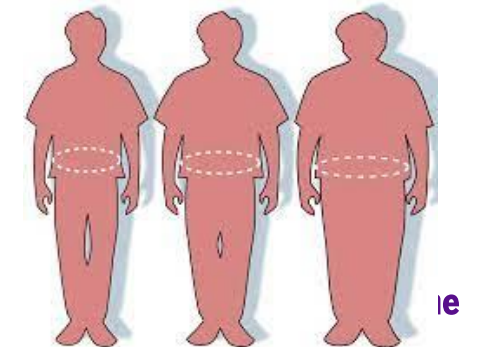
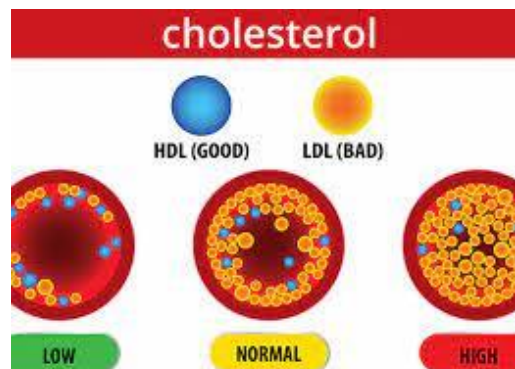
What is Heart Disease?

- The term “heart disease” refers to several types of heart conditions. The most common type of heart disease in the United States is coronary artery disease (CAD), which affects the blood flow to the heart. Decreased blood flow can cause a heart attack.
- The buildup makes the arteries more narrow, which makes it harder for the blood to flow through.
- If a blood clot forms, it can stop the blood flow which may lead to heart attack or stroke.



Heart Disease Risk Factors

- Some of the risk factors for heart disease include:
 - Cholesterol
 - Diabetes
 - Smoking
 - Obesity
 - Stress



What is a heart attack and stroke?

Heart Attack

- Happens when a part of the heart muscle doesn't get enough blood.
- Can occur when blood flow to the heart is blocked.
- Can lead to death.

Stroke

- Sometimes called a “brain attack”, occurs when something blocks blood supply to part of the brain or when a blood vessel in the brain bursts.
- Can occur when blood flow to the brain is blocked, causing brain cells to die.
- Can lead to disability and death.

Warning Signs of a Heart Attack

- Chest pain or discomfort
- Discomfort in other areas of the upper body
- Difficulty breathing
- Feeling lightheaded, breaking out in a cold sweat, or feeling like you are going to throw up

If you or someone you know has these symptoms, do not ignore these signs.
Seek immediate medical attention!

Dial 9-1-1

Warning Signs of a Stroke

The warning signs of a stroke happen suddenly.

A person may have one or more warning signs:

- Sudden numbness or weakness of the face, arm or leg, especially on one side of the body
- Sudden confusion, trouble speaking or understanding
- Sudden trouble seeing in one or both eyes
- Sudden trouble walking because of dizziness or loss of balance
- Sudden severe headache

If you or someone you know has these symptoms, seek immediate medical attention!

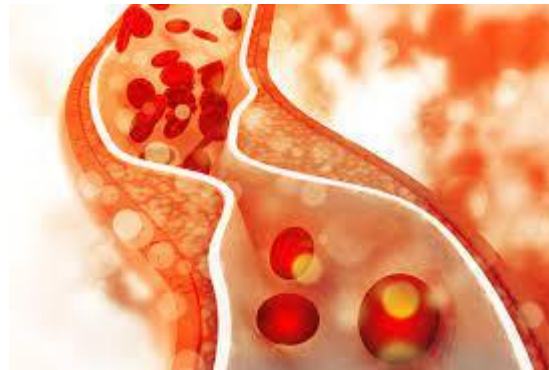
Dial 9-1-1

Discussion

- Have you experienced loss of friends/family due to a heart attack or stroke?
- How do these events affect your community?

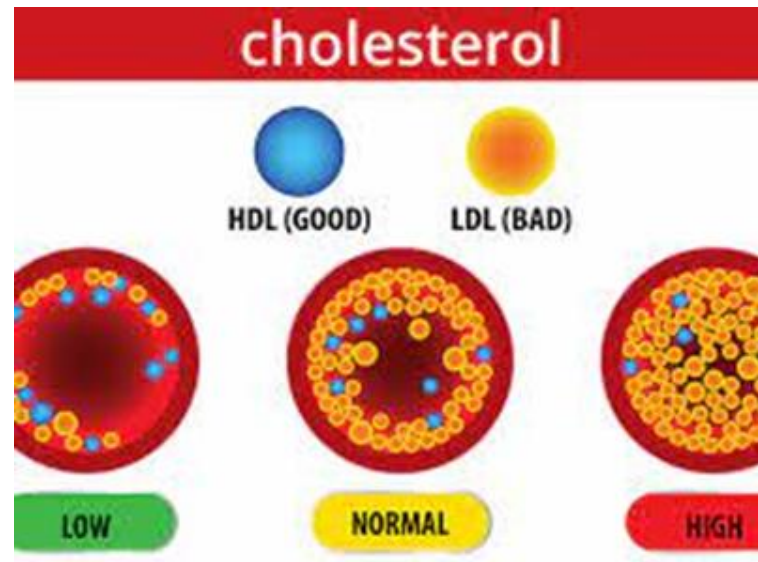
Cholesterol

- Cholesterol itself isn't bad. Cholesterol is just one of the many substances created and used by our bodies to keep us healthy.
- Some of the cholesterol we need is produced naturally (and can be affected by your family health history), while some of it comes from the food we eat.
- High levels of “bad” (LDL) cholesterol in the blood can build up in the inner walls of the arteries that feed the heart and brain, and can cause blockages
 - This increases the risk for coronary heart disease, heart attack, and stroke.



Cholesterol: 2 Types

- “Bad” Cholesterol (LDL) deposits fat and cholesterol in your blood vessels.
 - Remember: LDL = Lower is better!
- “Good” Cholesterol (HDL) cleans up fat and cholesterol from your blood vessels.
 - Remember: HDL = Higher is better!



Cholesterol and Diet

- Most high blood cholesterol comes from eating food with **trans fat and saturated fat**.
- **Limit** these foods containing **trans/saturated fats**:
 - Margarine / Clarified butter
 - Frozen meals
 - Fried foods
 - Pastries, cookies, and cakes
 - Meat (such as fatty beef and deli meats)
 - Whole milk and dairy products
 - Palm oil, coconut milk/oil
- **Choose** fats that are good for your heart, as part of a healthy diet.
 - Seafood and fish, such as salmon, trout, and herring
 - Olive and canola oils
 - Nuts (walnuts, almonds, pecans, peanut butter)
 - Avocados

What is Diabetes?

- The blood takes the glucose (from your food) to the cells of your body, where it is turned into the energy needed for daily life.
- Diabetes happens when the body does not produce enough insulin, or when the cells cannot use the insulin well (Known as “Type 2” Diabetes)
 - This means that the glucose cannot enter the cells and it builds up in the blood.
- People who have high levels of glucose in their blood have diabetes.
- Diabetes can lead to many health problems, including heart attack, stroke, blindness, nerve damage, and kidney problems.



Diabetes

- High blood pressure and diabetes often occur together.
- People with diabetes are more likely to have heart disease or a stroke than those without diabetes.
- Many people have diabetes or are at risk for developing diabetes, and don't know it.
 - Ask your doctor to check your blood sugar.
- Some people have trouble controlling their diabetes.
 - I can help you work with your doctor if you have diabetes and need help managing it.

Smoking

If you are a smoker, quitting smoking is the single most important thing you can do for your health. If you quit, you will live a longer and healthier life and improve the health of the people around you.

Smoking affects every part of the body and causes many health problems such as:

- Increase risk of lung cancer, heart disease and COPD
- Cause more severe asthma
- Put infants at risk for sudden infant death syndrome (SIDS)
- Many cancers, including lung cancer
- Heart disease and lung diseases, including chronic obstructive pulmonary disease (COPD)
- An increase in asthma attacks
- Impotence
- Premature birth/low-birth weight in babies

Discussion

- Within your community, do you feel like a lot of people smoke?
- How does smoking impact your community?

Smoking and Tobacco

All types of tobacco products are harmful.

- *Smoked tobacco*
- (e.g., cigarettes, cigars, pipes, loose tobacco)
- *Smoke-less tobacco*
- (e.g., chew, snuff, dissolvable tobacco)

Quitting tobacco can be very hard to do.

Cigarettes and tobacco contain nicotine, which is highly addictive.

It causes changes in the brain that make people want to use it more and more.

But the health benefits of quitting are worth it!

Let's find out...



Smoking: Benefits of quitting

Your Health Starts Improving the Minute You Quit Smoking.

- **In 20 minutes** your heart rate and blood pressure drops
- **In 24 hours** your risk of heart attack drops
- **In 2 days** your ability to taste and smell improves
- **In 2-3 weeks** your lung function and circulation improve and walking is easier
- **In 1 year** your risk of heart disease is cut in half
- **In 5 years**
 - Your risk of cancer of the mouth, throat, and esophagus drops by half
 - Your risk of stroke and heart disease begins to equal that of a non-smokers (in 5-15 years)
- **In 10 years** your risk of dying of lung cancer is about the same as a non-smokers

Also, Quitting Smoking Saves Money

- Cigarettes are very expensive. By quitting, a person who smokes one pack of cigarettes each day will save \$4,000 a year (maybe even more now due to inflation!)

Stress

- Stress may contribute to poor health behaviors linked to increased risk for heart disease and stroke, such as:
 - Smoking
 - Overeating
 - Lack of physical activity
 - Unhealthy diet
 - Being overweight
 - Not taking medications as prescribed

Stress Management

What can I do about stress?

- Fortunately, you can manage stress in ways such as:
 - Exercising regularly. It can relieve stress, tension, anxiety and depression. Consider a nature walk, meditation or yoga.
 - Making time for friends and family. It's important to maintain social connections and talk with people you trust.
 - Getting enough sleep. Adults should aim for seven to nine hours a night.
 - Maintaining a positive attitude.
 - Practicing relaxation techniques while listening to music.
 - Finding a stimulating hobby that can be fun and distract you from negative thoughts or worries.

Heart Disease, Risk Factors & Racial Discrimination

- Tell me about a time you felt stressed
 - Were you able to shift your attention?
 - What needed to happen in your environment to be able to do this?
- Are there stressors in your life that could be eliminated?
 - Tell me more

Breathing Exercise

We will end our session today with a 5 minute breathing exercise



Keep up the good work

You have worked hard over the last few months to improve your health, but don't stop now. Healthy living means making life-long changes, so keep it up!

You will sometimes run into problems but you can get back on track. Remember, you can always call me if you need someone to talk to!

Keep up with your healthy living goals!

- Use the Plate Planner Method to eat healthy meals
- Be sure to get 150 minutes of physical activity each week
 - 30 minutes a day for 5 days = 150 minutes
- Keep track of your blood pressure
- See your doctor regularly

You can do it!

- By controlling your diet, exercising more, and visiting the doctor regularly for check-ups, you CAN live a healthier life.
- Project ADHERE and NYU are resources for you throughout your journey to good health. Please don't hesitate to contact us if you have any questions or need assistance getting connected to care.
- Thank you for your commitment to better health for yourself, your family and your community!

End of Program Survey / Exit Interview

I will call you in a few weeks about completing an end of program follow-up survey.

You may also be invited to participate in an exit interview.

Thank you in advance for taking the time to share with us what you liked about the program and what can be improved.

Your feedback will help us to improve the program for the next cohort of patients.