Mi-CCSI

welcomes you to the 2nd in our 4 part Basics of Disease Management Webinar Series

Our speaker today is:

Susan Vos, BSN, RN, CCM

We will be starting shortly…

A few housekeeping items:

- **We will be recording this webinar for future viewing on our website. We will provide a verbal warning prior to starting the recording.**
- **We will place all phone lines on mute. You may submit a question through the chat feature or email a question to amy.wales@miccsi.org.**
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  (The recordings will be available within 5 business days)

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Hypertension, Hyperlipidemia and Obesity

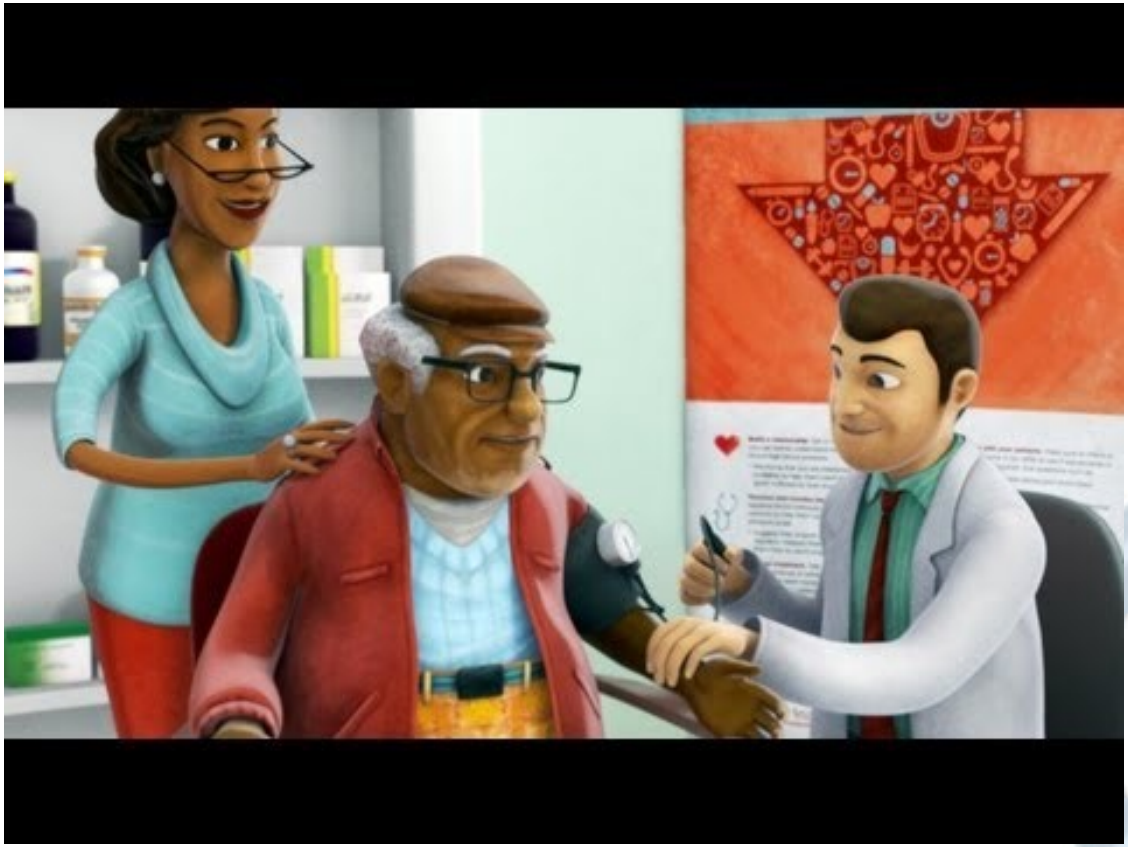
Mi-CCSI

Objectives

- Review the prevalence of hypertension, hyperlipidemia and obesity
- Correlation of the 3 conditions
- Discuss why it is important to treat these conditions
- Identify the key areas of medically managing the 3 conditions
- Discuss lifestyle changes and self-management goals for patients living with these conditions

National Statistics: Hypertension, Hyperlipidemia and Obesity
Approximately 30% of American adults have hypertension (high blood pressure)
Half of the population with hypertension do not have their condition under control
Nearly 1 in 3 American adults have signs of prehypertension and are at risk of developing hypertension
Hypertension is most prevalent in people age 55 and over
Men and women are almost equally affected
African Americans are more likely than Caucasians to have hypertension
33% of Americans have high levels of LDL cholesterol. That's 71 million people
1/3 of the population with hyperlipidemia does not have their condition under control
More than 60% of adults are considered overweight or obese based on their BMI
More than 1/3 of children and young adults ages 6-9 are considered to be overweight or obese

https://www.youtube.com/watch?v=XbLmIoyDJuE



Diagnosing Hypertension

- Hypertension (HTN): Clinical term for high blood pressure
  - Normal values systolic/diastolic range:
    - from 90/60 mmHg to 120/80 mmHg
  - People with HTN have blood pressure ≥ 140/90 (systolic or diastolic)
  - Often patients have no signs or symptoms of HTN
  - HTN is a chronic condition
    - There is no cure, but can be managed
    - Treatment focuses on lifestyle and or medications

Diagnosing Hyperlipidemia

- Hyperlipidemia (HL): Clinical term for high cholesterol. Sometimes also called hypercholesterolemia
  - Cholesterol is a natural substance found in our blood and nerve cells
  - Foods also contain cholesterol, specifically animal fats
    - Common sources include eggs, meat, cheese and other dairy
  - Normal values are total cholesterol <200 mg/dL,
    - LDL (bad) cholesterol <100 mg/dL,
    - HDL (good) cholesterol >40 mg/dL for men and > 50 mg/dL for women
    - Triglycerides <150 mg/dL
  - Hyperlipidemia is classified as a chronic condition by the center for Medicare and Medicaid
    - As with hypertension, treatment focuses on lifestyle and or medications

Diagnosing Obesity

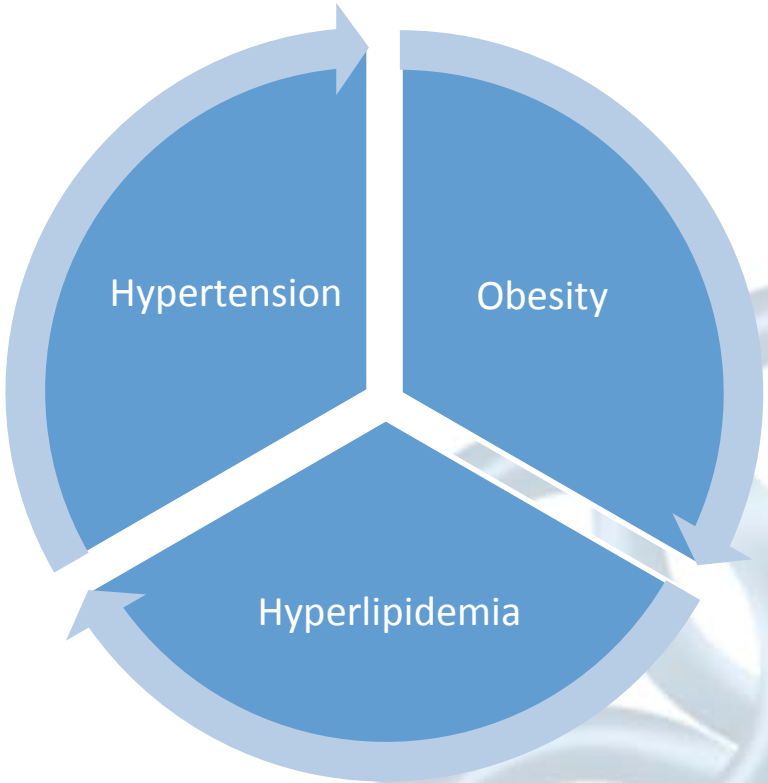
According to the Center for Disease Control, obesity is defined as, "weight that is higher than what is considered as a healthy weight for a given height."

- Obesity is determined by a person's body mass index (BMI) which is an estimate of body fat based on a person's height and weight
  - Normal BMI is 18.5 – 24.9
  - BMI of 25 – 29.9 is considered overweight
  - BMI $\geq$ 30 is considered obese

- Obesity is a serious concern because it is associated with poorer mental health outcomes, reduced quality of life, and the leading causes of death in the U.S. and worldwide, including diabetes, heart disease, stroke, and some types of cancer.

Relationship: Hypertension Hyperlipidemia and Obesity

- Obesity is a risk factor for hypertension and hyperlipidemia
- Foods high in cholesterol are usually also high in calories, which contributes to obesity
- The build-up of cholesterol in the artery walls can restrict blood flow, which increases blood pressure and can lead to hypertension



Risk Factors

HTN	Hyperlipidemia	Obesity
Obesity	Obesity	
Diabetes	Diabetes	
Smoking tobacco	Smoking tobacco	
Eating foods high in sodium and low in potassium and drinking excess alcohol	Unhealthy diet that is high in saturated fats, trans fats and cholesterol	Unhealthy diet
Not getting enough exercise or being inactive	Lack of exercise or physical activity	Lack of exercise or physical activity
Genetics and family history	Genetics and family history	Genetics and family history
Advanced age	Older age	
Prehypertension and/or pre-existing conditions		
African American		

Medical Management of Hypertension

ACE inhibitors (Angiotensin Converting Enzyme)	ARBs (Angiotensin II Receptor Blockers)	Beta Blockers	Calcium Channel Blockers	Diuretics
Prinivil (Lisinopril)	Diaovan (valsartan)	Toprol-XL (metoprolol)	Norvasc (amalodipine)	Lasix (furosemide)
Vasotec (enalapril)	Atacand (Candesartan)	Corgard (nadolol)	Cardizem (diltiazem)	Microzide (hydrochlorothiazide, HCTZ)
Altace (Ramipril)	Cozaar (losartan)			

Accurately taking a blood pressure

Ideally, use an automated cuff.

If using a manual cuff deflate the cuff slowly (if too quickly, the BP can appear 20 to 30 mm Hg lower that it really is).

Patient preparation

- Place cuff on a bare arm, with the cuff entirely covering the arm's circumference
- Ensure proper positioning: seated in a chair with back support
- Feet planted firmly on the floor, legs uncrossed and arms supported
- Patients should have an empty bladder
- Refrain from talking with the patient during the reading
- If the blood pressure is 140/90 mg Hg or higher, confirm the reading with a repeat BP

Demonstration

https://www.youtube.com/watch?v=gUHALsLeeoM

Medical management of hyperlipidemia

- Statins are the most common medications used to lower cholesterol
  - Statins should be taken at night because most cholesterol is synthesized or produced when dietary intake is at its lowest, which occurs overnight

Common prescribed Statins	Other medications used to lower LDL cholesterol and triglycerides and increase HDL cholesterol
Lipitor (atorvastatin)	Nicotinic acid
Zocor (simvastatin)	Fibrates
Crestor (rosuvastatin)	Bile acid sequestraints

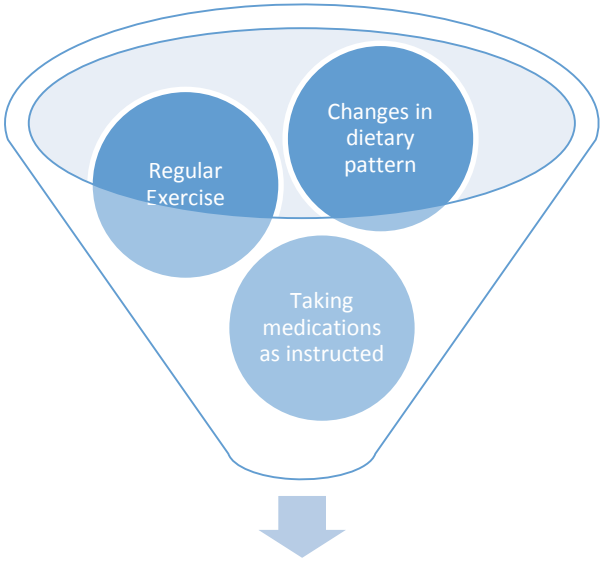
Lifestyle changes to help address hypertension hyperlipidemia and obesity

- Start and maintain a healthy eating plan
- Reduce the amount of salt in the diet
- Lose weight if overweight or obese
- Avoid drinking too much alcohol
- Stop smoking
- Reduce stress
- Exercise at least 30 minutes per day most days of the week

Importance of Physical Activity

- Improves blood pressure and cholesterol levels
- Decreases weight
- Lowers the risk of type 2 diabetes, heart disease, stroke and some cancers
- Strengthens lungs muscles and joints
- Slows bone loss
- Increases energy levels
- Helps with relaxation, coping and stress management
- Promotes better sleep

Challenges of Self-management Goals



Healthy Lifestyle

Care team members can help patients by supporting them with self-management plans

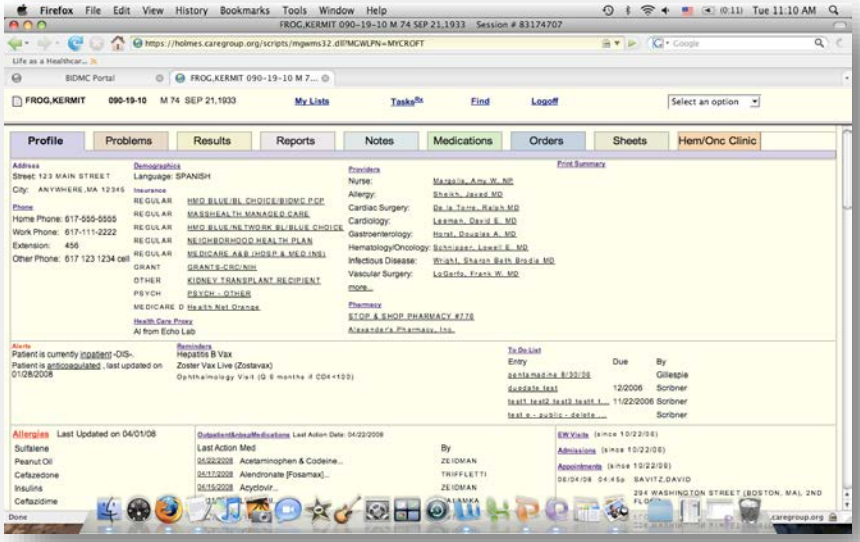
Beyond medical management

- https://www.youtube.com/watch?v=ac13iuGByRQ

Quality Metrics in the Practice

Frequency	Test	Impact
Annual Exam and at each visit	Blood Pressure	The first indication of high blood pressure
	Cholesterol	The first indicator of hyperlipidemia
	BMI	Indicator to determine obesity

How do I help manage hypertension, hyperlipidemia and obesity in my practice?



- Use of the registry tool
- Pre-visit planning

Congratulations!

Congratulations, you have completed the course.

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Thank You!

References

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