

CARDIOVASCULAR DISEASE IN WOMEN

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Quiz

- One out four deaths in women living in USA is due to which of the following?
- (a) Breast Cancer (b) Colon Cancer
- (c) Heart disease and stroke (d) HIV/AIDS
- (e) Covid 19 Pneumonia

























Economics

- 2001
- Nationwide cost for all cardiovascular disease was \$300 billion
- Heart disease the cost was \$105
 billion
- Stroke, \$28 billion
- Lost productivity due to stroke and heart disease cost more than \$129 billion

2005 Epidemiological Report – Northwest Indiana



"Breast Cancer is the REAL issue!"

- Who cares about heart disease doc...I am more concerned about: BREAST CANCER and lung cancer!"
- In a recent survey, 75% of women identified cancer as their leading cause of death...



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Coronary Heart Disease in Women

- Presentation and differences from men
- 2/3 of women who die suddenly have no previously recognized symptoms.
- Women are more prone to noncardiac chest pain.....
- In fact they may experience little or no squeezing chest pain in the center of the chest, lightheadedness, fainting, or shortness of breath with an MI (as seen on "ER").

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Nationally: **The Problem – AWARENESS** Perception Reality • 67% • chest pain is the knowledgeable that presenting symptom in <50% chest pain can be heart disease of women <10% Almost half of MIs knowledgeable that in women present SOB, nausea, with SOB, nausea, indigestion can be indigestion, fatigue heart disease and shoulder pain

Not so straightforward

- Because of these *atypical symptoms*, women seek medical care *later* than men and are more likely to be misdiagnosed.
- Women presenting with MI and CAD are more likely to be older, have a history of DM, HTN, Hyperlipids, CHF, and unstable angina than male counterparts.
- Because of these comorbid conditions, there tends to be diagnostic confusion.

The Need for Prevention in Women

- 9,000 US women younger than 45 sustain a heart attack each year.
- "Thus the priority for coronary prevention is substantial for women of all ages."
- Mortality associated with acute MI among women younger than 65 y/o is almost twice as high among men.

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Women vs. Men:

- Mortality from CABG-particularly among younger women-is double that among men.
- More women than men die 1 year after an MI.
- CHD is Largely Preventable
- We need to address *risk factors* earlier and more aggressively, thereby reducing women's cardiovascular risk.

JNC 7 RECOGNIZES THE FOLLOWING AS CARDIOVASCULAR (CV) RISK FACTORS

Hypertension

- Dyslipidemia
- Cigarette smoking
- Obesity (BMI ≥30 kg/m²)
- Physical inactivity
- Diabetes mellitus

- Diabetes memory
 Microalbuminuria (or estimated GFR* <60 mL/min)
 Age (>55 years for men, >65 years for women)
 Family history of premature CVD (men <55 years or women <65 years)

The #1 Preventable Risk- Smoking

- A. 50% of heart attacks among women are due to smoking. Smokers tend to have their first heart attack 10 years earlier than nonsmokers.
- B. If you smoke, you are 4-6x's more likely to suffer a heart attack and increase your risk of a stroke.
- C. Women who smoke and take OCP's increase their risk of heart disease 30x's.

2. Obesity A. 1/3 of adult women are obese and its *increasing*

B. Active women have a 50% risk reduction in developing heart disease.

Hypertension

- 65% of all hypertension remains either undetected or inadequately treated.
- People who are normotensive at 55 have a 90% lifetime risk of developing HTN.
- Prevalence increases with age and women live longer- hypertension is more common in females.
- HTN is more common with OCP and obesity.

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Risk Factors: Diabetes

- Diabetes increases the risk of CHD 3-7 X's in women versus 2-3 X's in men.
- Diabetic women who smoke have a 84% higher risk of developing stroke than nonsmokers.
- 2 of 3 people with diabetes die from CHD or stroke.

Cholesterol

- More than 55 million women (45million men) have TC>200.
- Check cholesterol at least once q 5yr's starting at age 20.
- 36 Million people in the US should be taking a statin according to guidelines, but only 11 million are.

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Women and HTN—JNC VII

- The relationship bet. BP and CV events is continuous, consistent and independent of other risk factors.
- The higher the BP the greater the chance of MI, CHF, stroke, and kidney disease.
- Can try to achieve good BP through **lifestyle changes**.

Modification	Recommendatio n	Expected systelic reduction
Weight reduction	Goal of BMI 18-25 Waist <35inches	5-20 mm Hg per 10kg wt loss
DASH	Fruits, veges, low-fat dairy products, less fat	8-14 mm Hg
Sodium restriction	<2.4 g every day	2-8 mm Hg
Physical activity	30 mins of aerobic 4x's a week	4-9 mm Hg
Reduced EtOH (1/2 for women)	2-12 oz beer, 1 10oz wine, 3 oz 80proof whiskey in men	2-4 mm Hg

Glycemic control In Diabetes

- Treatment of hyperglycemia has been shown to reduce or delay complications of diabetes such as retinopathy, neuropathy, and nephropathy
- keep HBA1C <u><</u>6.5%
- FPG <100
- 2 hour 75g GTT-Impaired glucose tolerance- 140-199.

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Cholesterol

- Women at high risk should be considered for statin therapy regardless of cholesterol-LDL levels.
- Statin drugs have already surpassed all other classes of medicines in reducing the incidence of the major adverse outcomes of death, MI, and stroke. NEJM 350:15 April 8, 2004

Metabolic Sy	P	
RISK FACTOR	DEFINING LEVEL	RA
Abdominal Obesity	Waist Circumference	
Men	>40 inches	pla
Women	>35 inches	VIC
TG's	<u>></u> 150	
HDL	~~~~~	
Men	<40	
Women	<50	
BP	<u>></u> 130/85	
Fasting Glucose	<u>></u> 100 mg/dl	

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COMMON CULTURAL MYTHS ABOUT CHD TREATMENT

- When BP is normal, it is okay to skip medications
- Do I have to take these for the rest of my life? ? ?
- Roots and Herbs are better than medications
- "Medicine ain't working !"
- "Medicine will affect your Nature !"
- "Y'all don't know if the pills cause cancer !"

- 1. Aggressive medical therapy appears particularly effective in women.
- 2. Women face more adverse outcomes with revascularization, due to procedural complications, suboptimal gender-based risk Stratification and possibly microvascular disease.
- 3. Long term revascularization risk reduction and outcomes for women are similarly beneficial to men.

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When It Comes to the matters of the Heart . We Get to the Heart of the matter . .