

WOMEN'S HEART AND VASCULAR SYMPOSIUM 2019



Friday, November 15, 2019

Omni Scottsdale Resort & Spa Montelucia

Presented By 
Dignity Health.

WELCOMING REMARKS

Rachel M Bond, MD, FACC

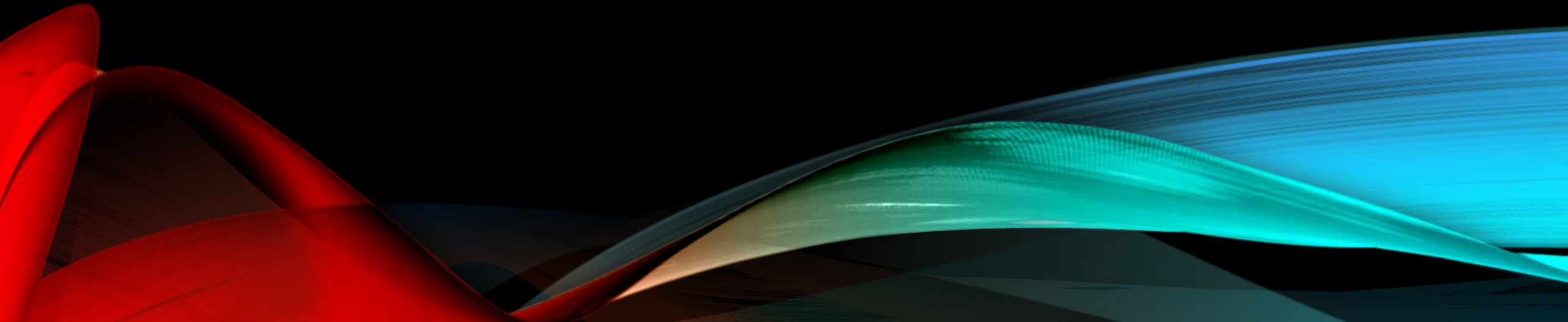
Course Director

Medical Director, Women's Heart Health

Dignity Health, East Valley Arizona

PLEASE ENGAGE, EDUCATE & SHARE WITH
US VIA

#WHVSymposium19



DISCLOSURES

- As a provider of Continuing Medical Education accredited by the Arizona Medical Association, Dignity Health East Valley must insure balance, independence, objectivity, and scientific integrity in all of its educational activities.
- We must be able to show that everyone who is in a position to control the content of an educational activity has disclosed all relevant financial relationships with any commercial interest to the provider and that any conflicts are resolved.

<u>Presenter</u>	<u>Disclosure</u>
• Rachel M Bond, MD	None

THE ODYSSEY OF WOMEN'S HEART HEALTH



Hygieia: Goddess of
Women's Health

With **Asclepius**, God of
Medicine

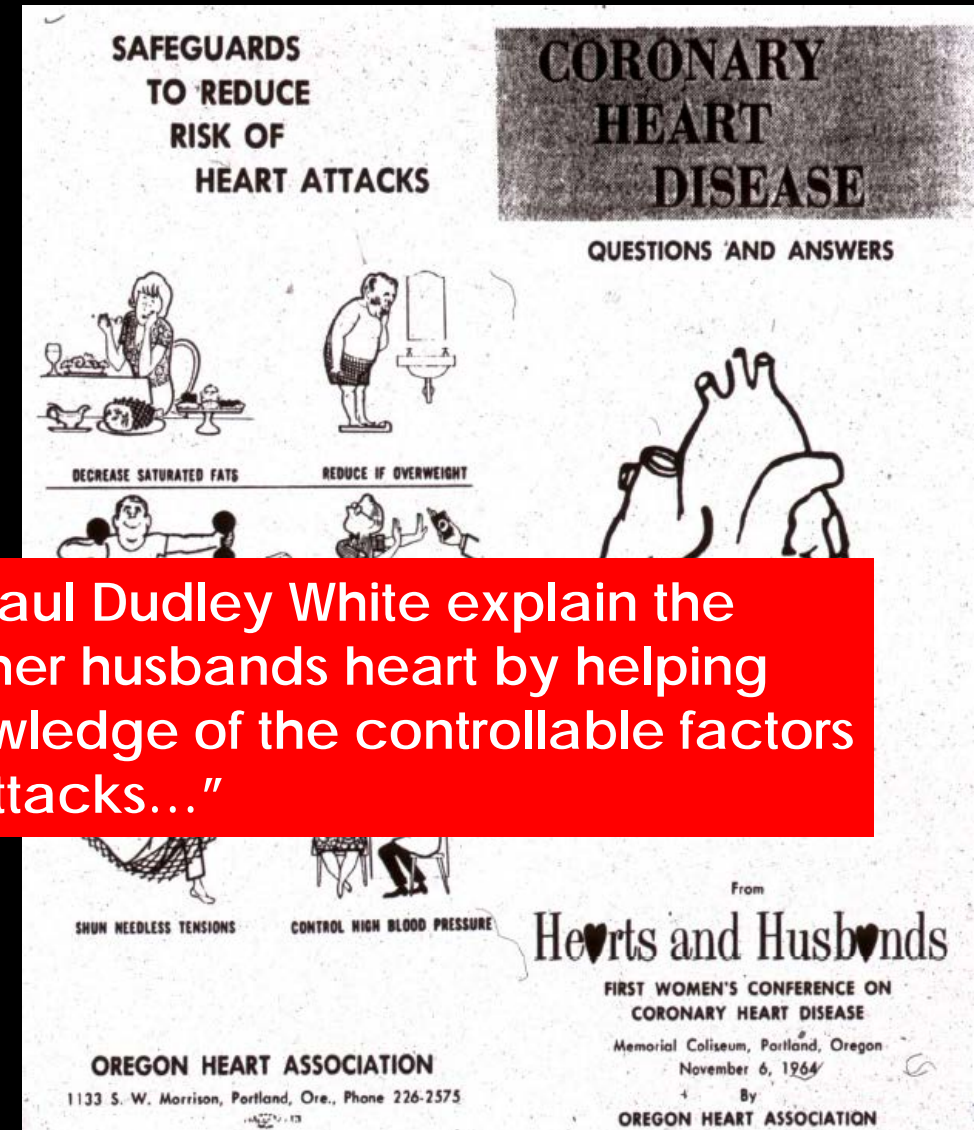
HEART DISEASE PREVENTION IN THE 1960's

♥ First Conference for Women on Heart Disease.

♥ Title: "Hearts and Husbands"

♥ Objective " ~10,000 women attended to hear Dr. Paul Dudley White explain the important role of the wife in protecting her husband's heart by helping him take advantage of the current knowledge of the controllable factors that can help reduce the risk of heart attacks..."

♥ Conference for women only



Reader's Digest

February 1995

\$2.25

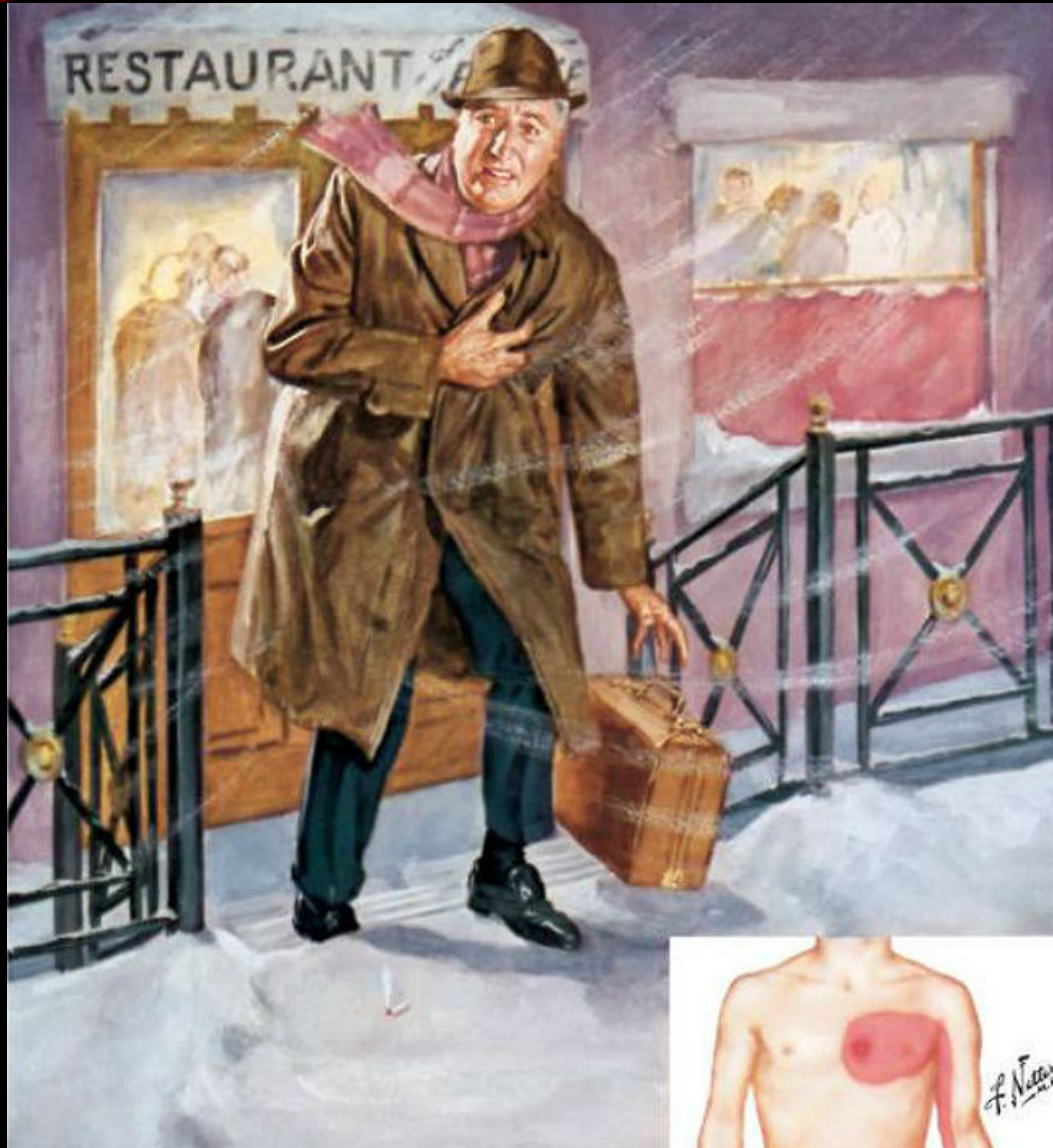
Is Your Husband Headed for a
HEART ATTACK?

Page 137

**NEW
TEST
INSIDE**



DEPICTION OF HEART DISEASE: A MAN'S DISEASE



Elsevier, Inc. - NetterImages.com

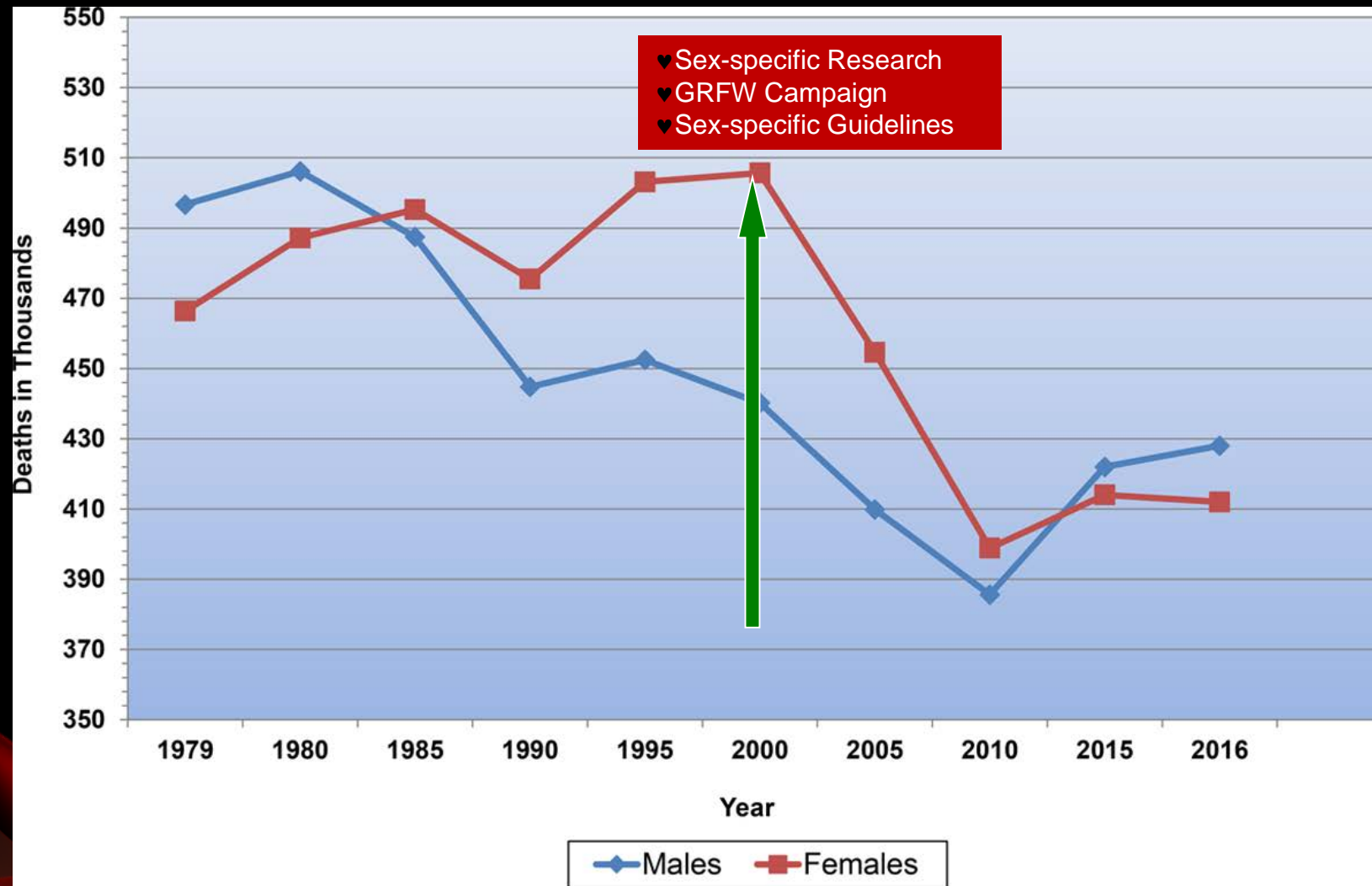


#WHVSymposium19

SCOPE OF THE PROBLEM

- ♥ 47.8 Million US women are affected by CVD
- ♥ #1 cause of death among women
- ♥ Accounts for **1 in every 3 deaths** each year
(~**1 death/80 seconds**)
 - ♥ More than all cancers, Alzheimer & lung disease combined
 - ♥ 1 in 31 deaths each year (from breast cancer)
- ♥ **90% of women** have **1 or more risk factor** for developing heart disease
- ♥ **80%** of heart disease is **preventable**

Cardiovascular Disease (CVD) mortality trends for males and females (United States: 1979–2016)

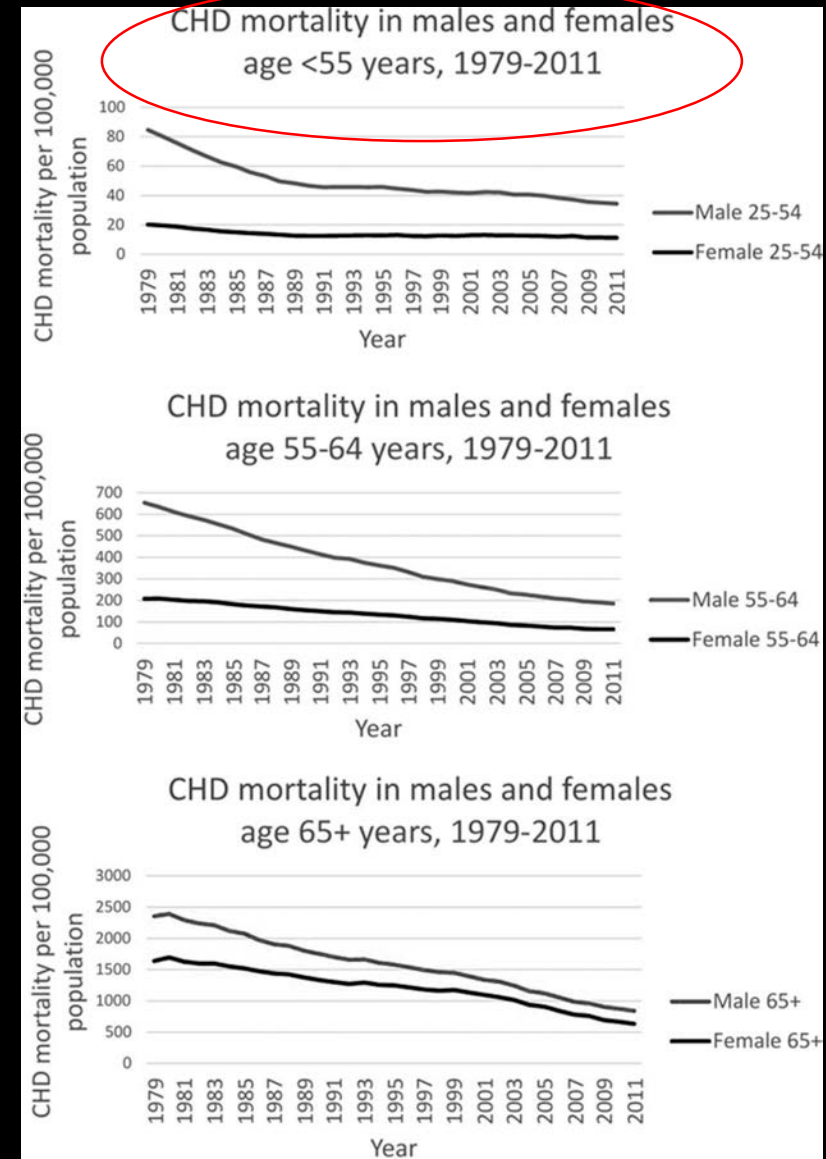


Emelia J. Benjamin. Circulation. Heart Disease and Stroke Statistics—2019 Update: A Report From the American Heart Association, Volume: 139, Issue: 10, Pages: e56-e528, DOI: (10.1161/CIR.0000000000000659)

ANNUAL PERCENTAGE CHANGE IN CHD MORTALITY AMONG US ADULTS BY SEX

- ♥ Heart disease deaths have declined steadily over the past 3 decades in people >65.
- ♥ Improvements in death rates remain slow in people <55, particularly in women.

WHY?



AWARENESS IS LACKING!

AHA Special Report

Fifteen-Year Trends in Awareness of Heart Disease in Women Results of a 2012 American Heart Association National Survey

WRITING COMMITTEE

Lori Mosca, MD, MPH, PhD, Chair; Gmerice Hammond, MD; Heidi Mochari-Greenberger, PhD, MPH, RD; Amytis Towfighi, MD; Michelle A. Albert, MD, MPH; on behalf of the American Heart Association Cardiovascular Disease and Stroke in Women and Special Populations Committee of the Council on Clinical Cardiology, Council on Epidemiology and Prevention, Council on Cardiovascular Nursing, Council on High Blood Pressure Research, and Council on Nutrition, Physical Activity and Metabolism

AWARENESS IS LACKING!

- ♥ ~2500 women > 25 years old surveyed
- ♥ Between 1997-2012, awareness among whole study population nearly doubled: 30% → 56%
- ♥ Still low in minorities:
 - ♥ Blacks: 36%
 - ♥ Hispanics: 34%

AWARENESS

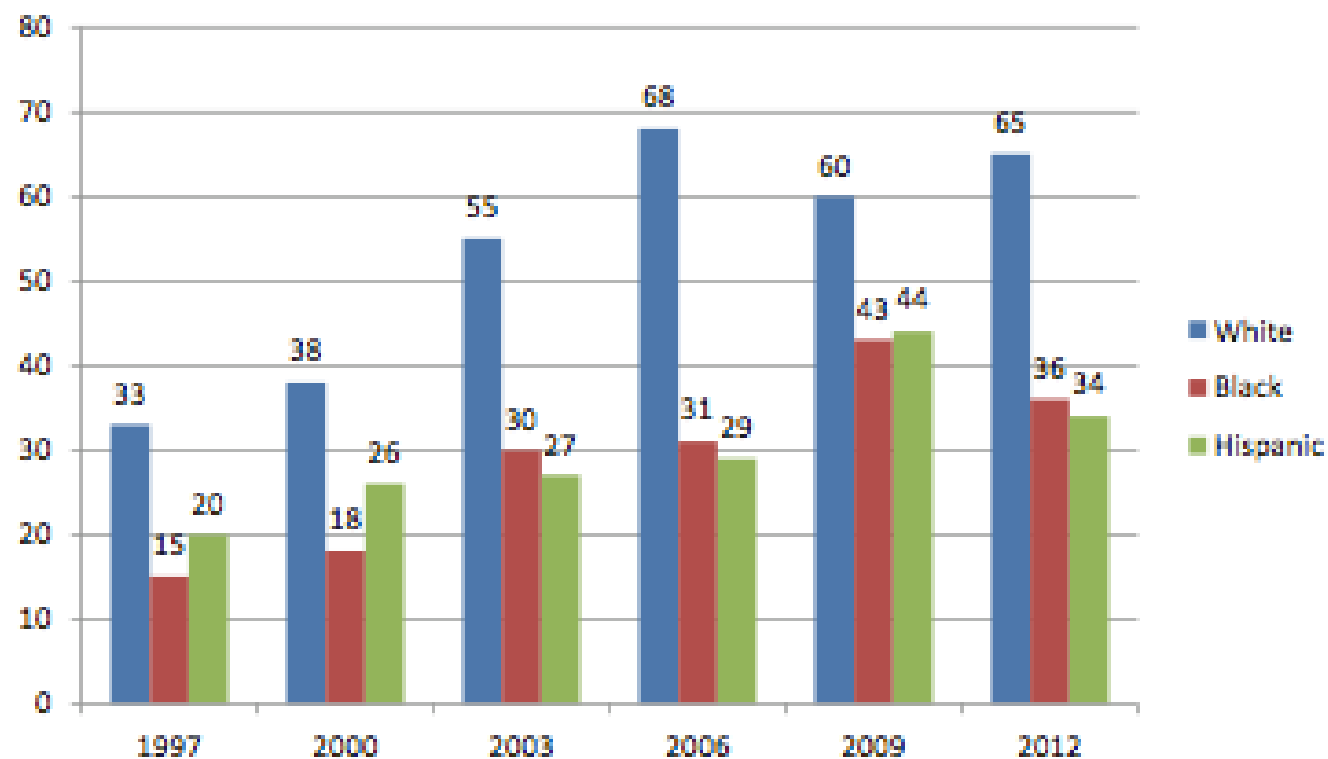


Figure. Trends in awareness that heart disease is the leading cause of death in women.

CENTRAL ILLUSTRATION: Knowledge, Attitudes and Beliefs Regarding Cardiovascular Disease in Women: The Women's Heart Alliance

1
Cardiovascular disease (CVD) is the top cause of death in women in the U.S.
CVD kills more women than all cancers combined

400,000
women died from CVD
in 2016 (U.S.A.)

And yet ...



Only 22% of PCPs and 42% of cardiologist feel well prepared to assess CVD Risk

Only 39% of PCPs make CVD a top priority.

Only 39% of primary care physicians (PCPs) make CVD a top priority

Only 22% of PCPs and 42% of cardiologists feel well prepared to assess CVD risk

A need to
raise awareness
of risk and
symptoms of
heart disease

A need to
de-stigmatize
the disease risk
by countering
stereotypes
with facts

A need to
invest in women's CVD research
and physician education/training

Gender Bias in the Treatment of Women...

“...The community has viewed women’s health almost with a ‘**bikini**’ approach , looking essentially at the breast and reproductive system, and almost ignoring the rest of the woman as part of woman’s health...”



Wenger, MD

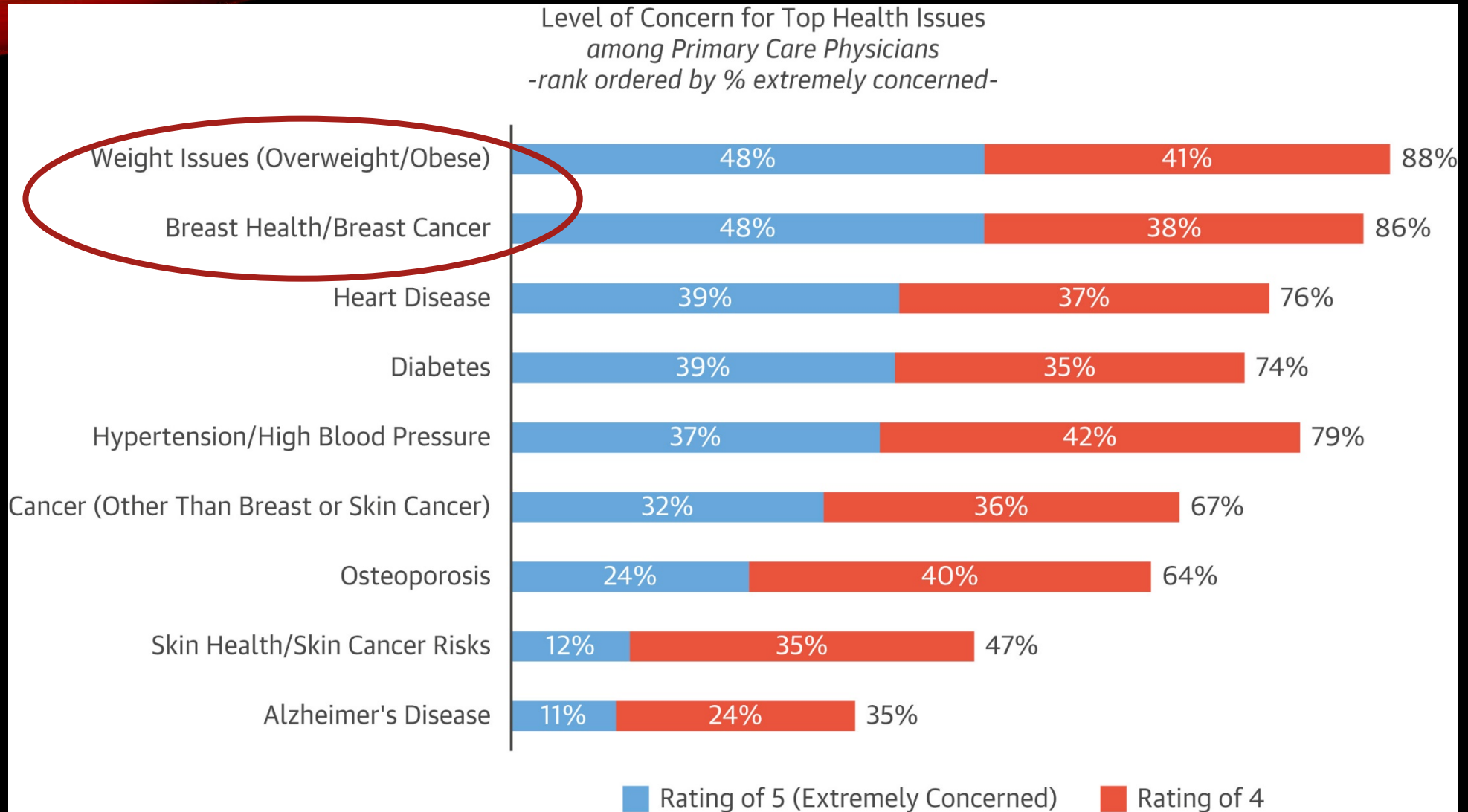
Professor of Medicine

University

Circulation , 2004

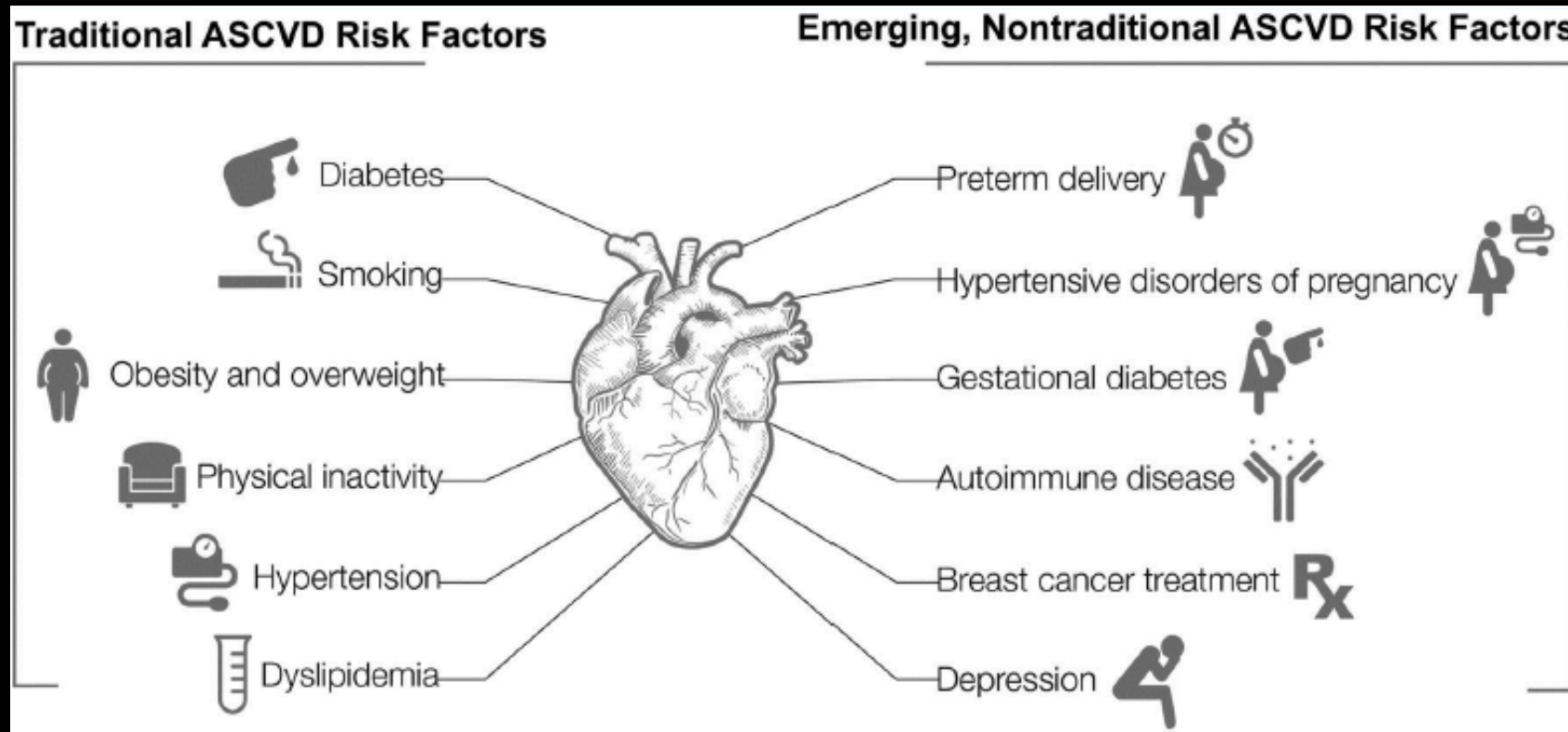
Nanette

Emory



Merz NB, et al. Knowledge, Attitudes, and Beliefs Regarding Cardiovascular Disease in Women: The Women's Heart Alliance. JACC, 2017. 70 (2): 123-132.

LACK OF AWARENESS: GENDER-SPECIFIC RISK FACTORS



Mariana Garcia et al. Circ Res. 2016; 118: 1273-1293.

LACK OF AWARENESS: THE MECHANISMS OF CVD IN WOMEN & BEST APPROACH

Potential mechanisms

**It is a Clinical Syndrome
and not a final
diagnosis!**

Plaque disruption

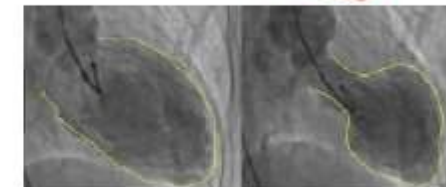
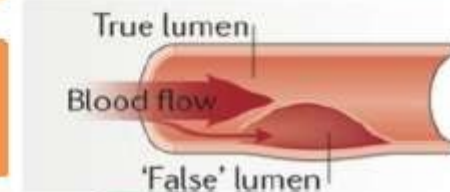
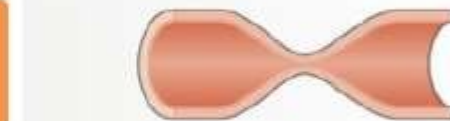
Vasospasm

Dissection

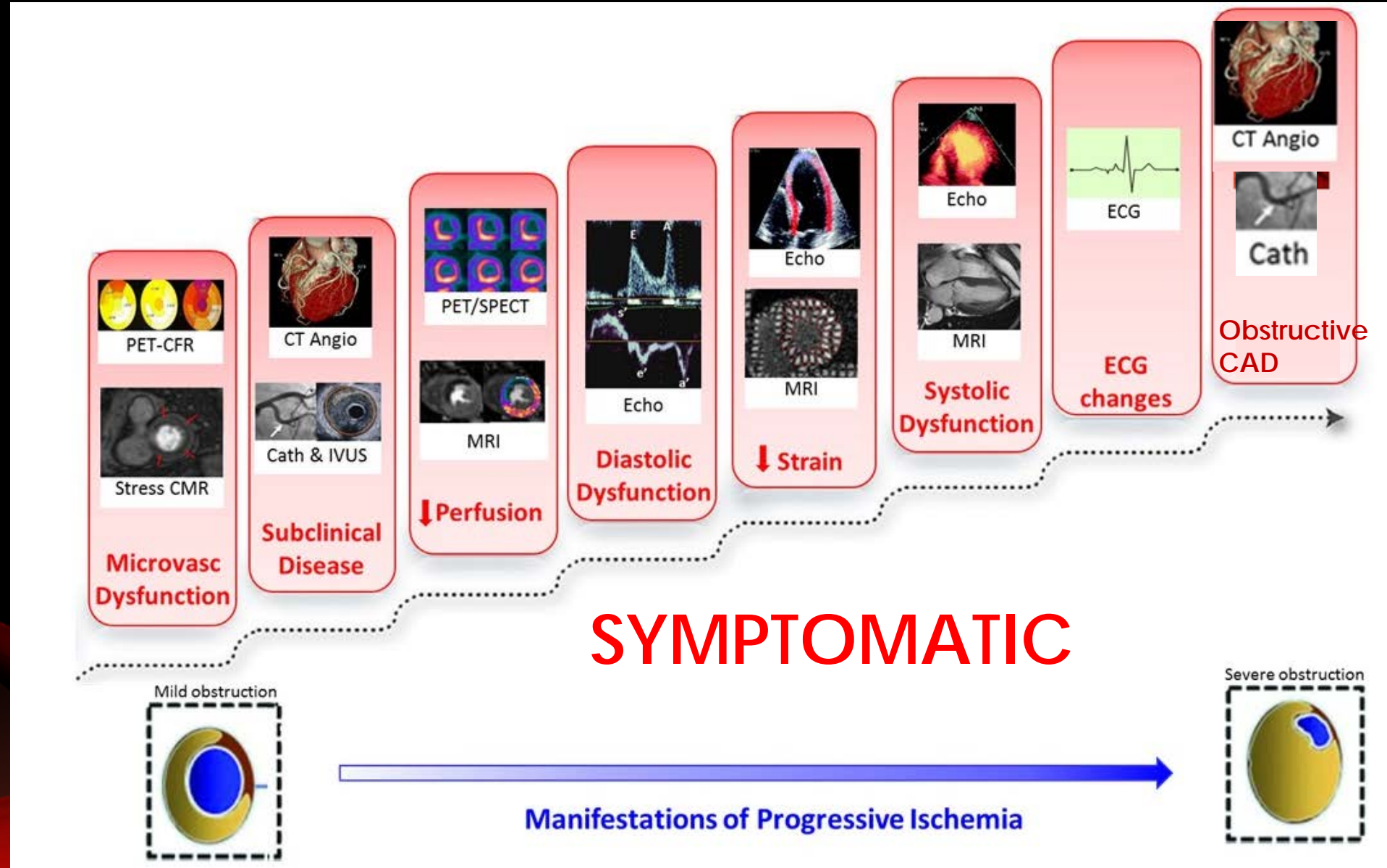
Thromboembolism

Microvascular
dysfunction

Supply/demand
mismatch



LACK OF AWARENESS: THE MECHANISMS OF CVD IN WOMEN & BEST APPROACH



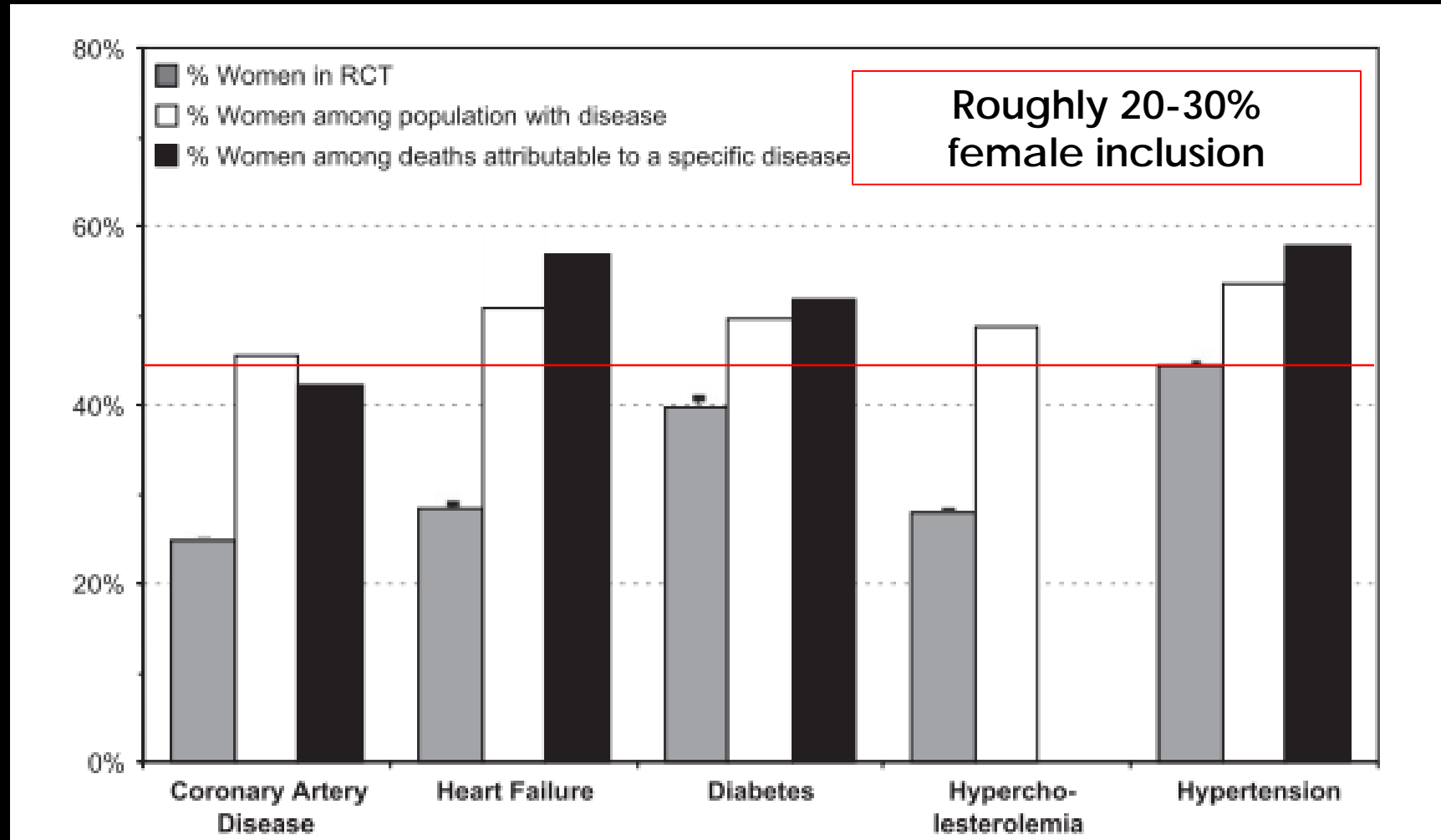


SEX BIAS & UNDERREPRESENTATION OF WOMEN IN CLINICAL TRIALS

- ♥ Organizations encourage companies to enroll patients who reflect the makeup of the population most likely to benefit from the product.
 - ♥ In 1993, the NIH mandated that women and minorities be included in any government-funded health research.
 - ♥ In 1994, the Office of Women's Health was established within the FDA.
 - ♥ That year, the Center for Devices and Radiological Health instituted a policy to address the possibility of gender bias in submissions and review documentation for new medical devices.
- ♥ In 2007, a meeting involving representatives from academia, regulatory agencies, and industry was held to develop strategies for improving representation of women in CVD clinical trials and to ensure that clinical trial results are reported by sex.

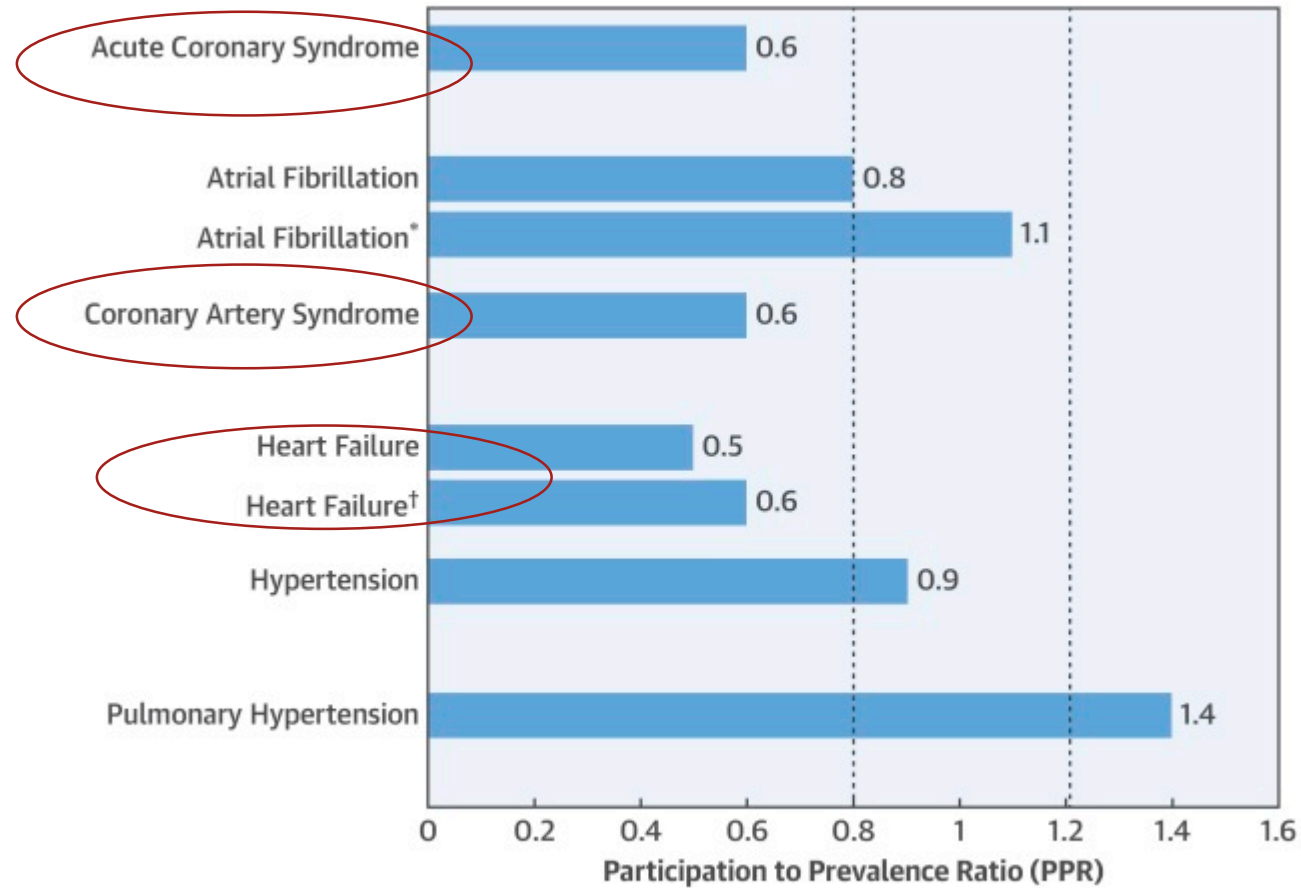
Despite this...

UNDERREPRESENTATION OF WOMEN IN CARDIOVASCULAR CLINICAL TRIALS



Chiara Melloni et al. Circ Cardiovasc Qual Outcomes. 2010; 3: 135-142.

CENTRAL ILLUSTRATION: Participation of Women of CVD Clinical Trial: Prevalence-Corrected Estimate



Scott, P.E. et al. J Am Coll Cardiol. 2018;71(18):1960-9.

CHALLENGES IN WOMEN RELATED TO CVD RESEARCH

Although Gender Bias Comments are Required and Gender Inclusion is Encouraged, There Remains Limitations

- ♥ Lower referral rate in women vs. men to sub-specialist for coronary artery disease and congestive heart failure.
- ♥ Following the "status quo"

In Doing So:

- ♥ Treatment disparities for guideline-directed medications & device underutilization
 - ♥ Coronary Heart Disease (>>35-54 years old)
 - ♥ Peripheral Arterial Disease
 - ♥ Atrial Fibrillation
 - ♥ Valvular Heart Disease
 - ♥ Congestive Heart Failure (reduced and preserved)
- ♥ Women Have More Adverse Outcomes

RECOMMENDATIONS

♥ How can we change this?

- ♥ An integrated, multifactorial approach, including primary, and secondary prevention
- ♥ Keeping sex and gender in mind when assessing heart disease or when providing care
- ♥ Research and improvement in clinical practice (FUNDING)
 - ♥ Move beyond simple risk factor assessment
 - ♥ Clinical trials designed to address distinct cardiovascular disease in women
- ♥ Expanding initiatives such as the Go Red for Women campaign, Women's Heart Health Centers of Excellence, and encouraging cardiovascular disease risk in women
- ♥ Women's Heart Health Centers of Excellence



THANK YOU!

Dr. Rachel M. Bond, MD
480-821-3800 (Office)
drrachelmbond@gmail.com



@DrRachelMBond