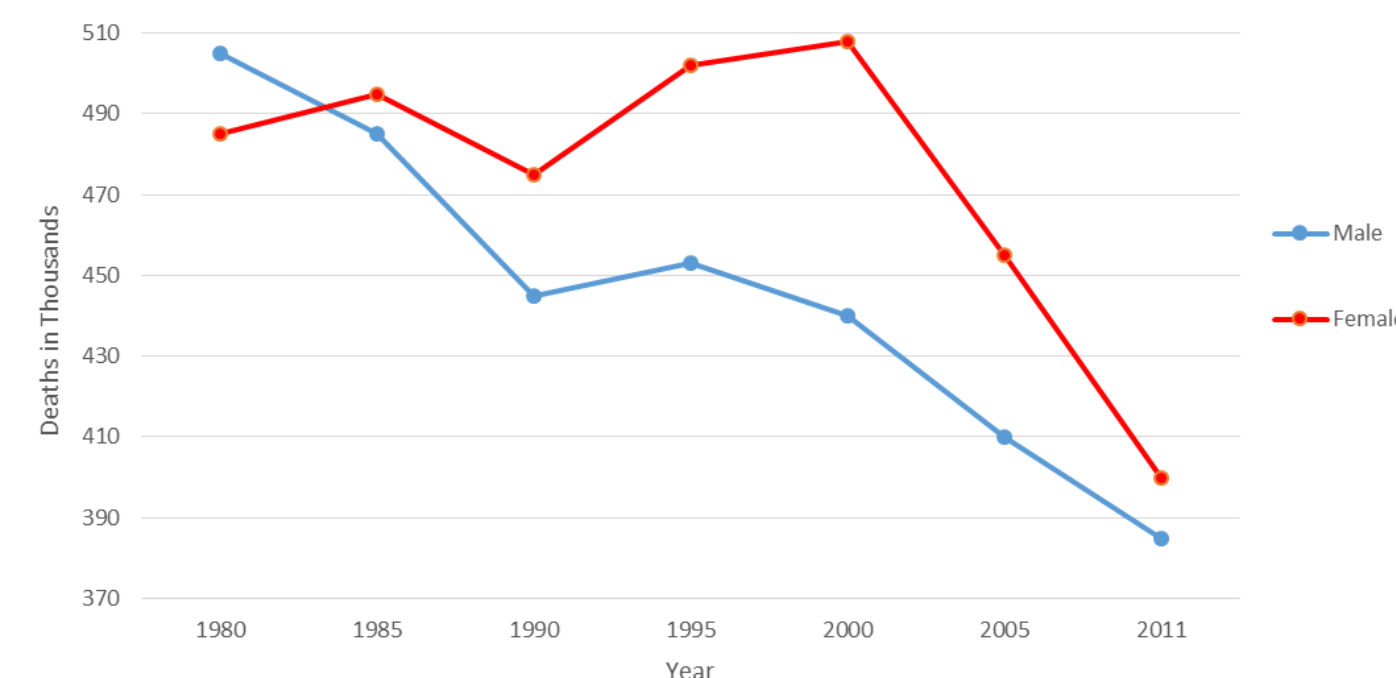


Women's Cardiovascular Health: THE HEART TRUTH

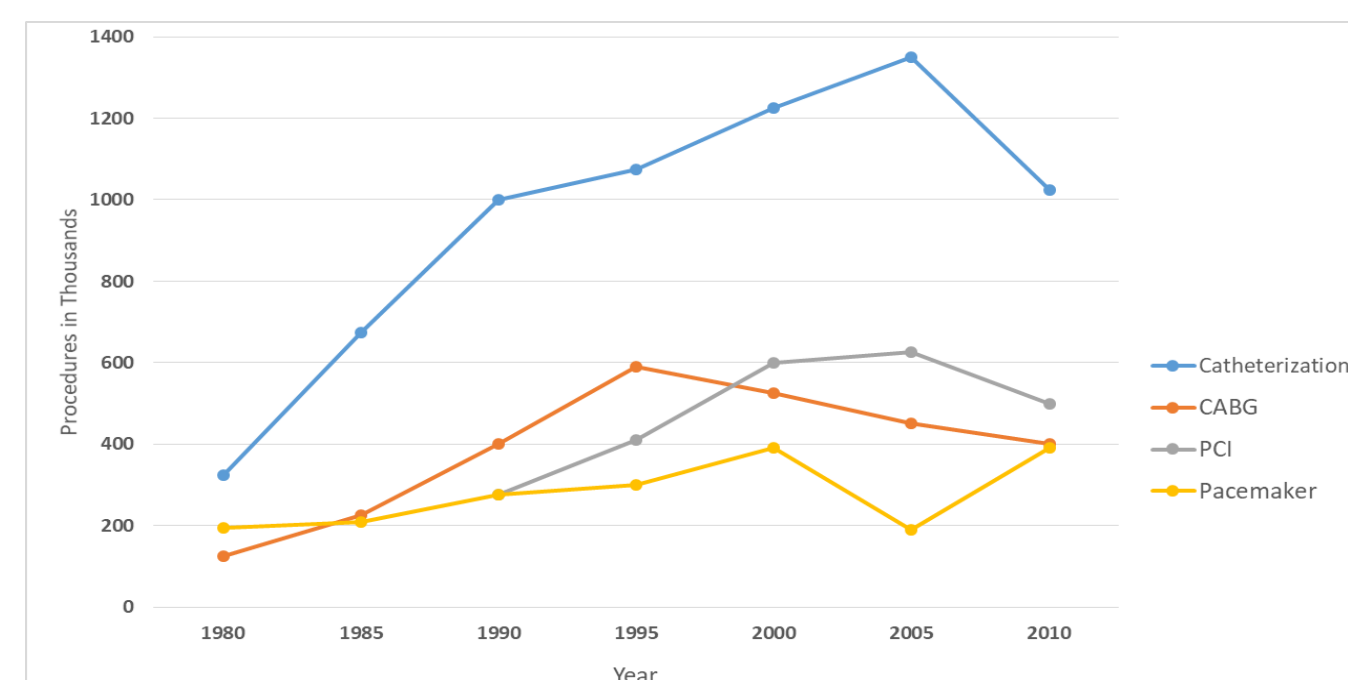
Elnaz Assadpour, Faculty of Health, IHST 3545, York University

ABSTRACT

The importance of studying women's cardiovascular health lies in alarming global trends, where despite a lower prevalence of cardiovascular disease, women have higher mortality rates. Contribution of this multifactorial web to cardiovascular disease mortality in the face of significant medical advances is explored.



Cardiovascular Mortality Rate in United States
Adapted from Mehta et al., 2016



Usage of Cardiovascular Treatment Modalities
Adapted from Faxon & Williams, 2016

RESEARCH QUESTION

What are biomedical and socioenvironmental factors that can provide plausible explanations for the higher cardiovascular mortality trends observed in women?

METHODS

A scoping review of peer-reviewed journal articles from databases MEDLINE and Sociological Abstracts from inception to March 12th, 2017 was conducted. Grey literature from public health, and research institutions was also included.

RESULTS – Sex Differences

Until the 1990's women were excluded from most medical research. Among other things, this has resulted in poorly understand pathophysiology.

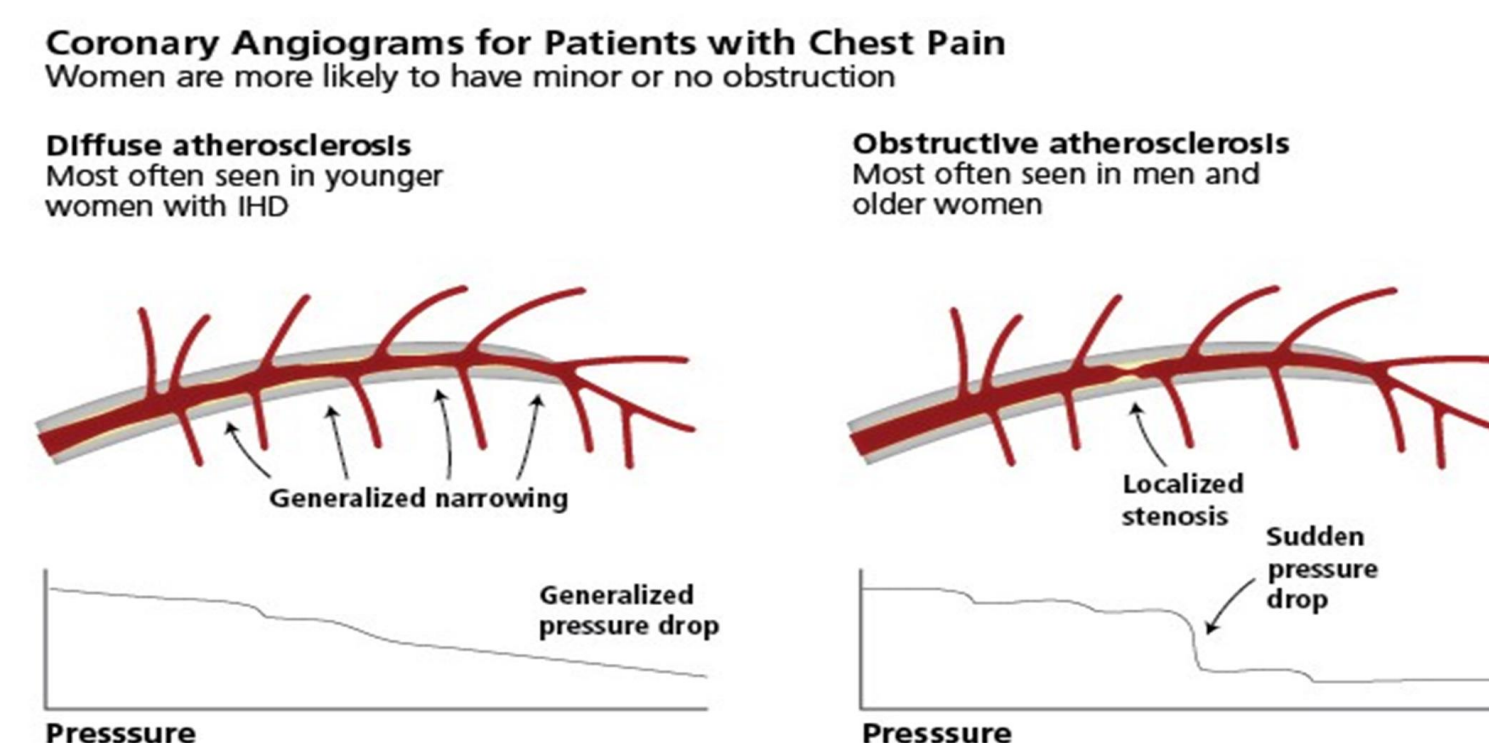


Image from Gendered Innovations, from <https://genderedinnovations.stanford.edu/case-studies/heart.html#tabs-2>

Gold-standard treatments commonly used (e.g. PCI, CABG, Pharmacotherapy) have lower treatment efficacy rates in women than in men.

Diagnostic tools, (e.g. cardiac enzyme markers, electrocardiograms) as well as physical assessments which have been developed using male subjects have lower sensitivity in detecting cardiovascular disease in women.

The combination of these factors leads to dismissal of 'female pattern' presentation leading to:

- 50% of heart attacks in women left undiagnosed.
- Fewer women being offered preventative, curative, and rehabilitative interventions by clinicians.

RESULTS – Gender Differences

Socioeconomic status has one of the greatest correlation with cardiovascular mortality. Women have higher rates of poverty and lower salaries.

Globally, women earn **24%** less than men on average

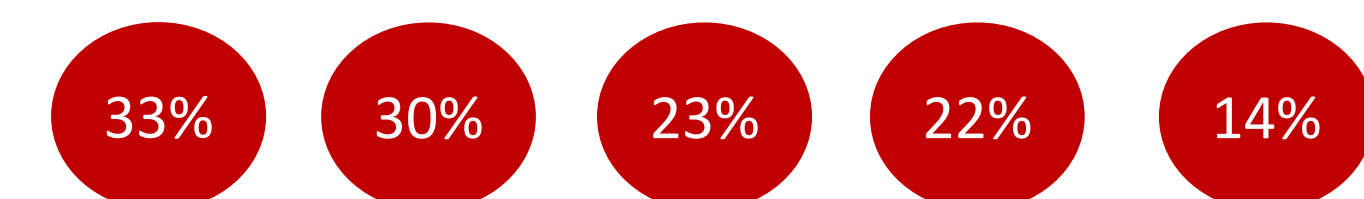


Image adapted from Mlambo-Ngcuka, 2016

Women are under-represented in management and decision-making roles, reducing their agency in advocating for equitable policies.

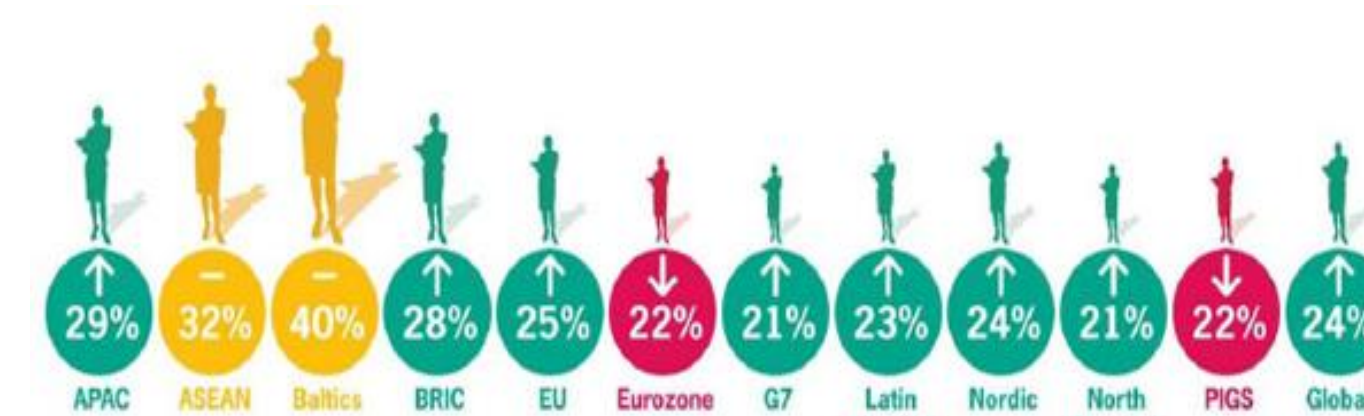


Image by Grant Thornton, n.d.

Female gender roles of household, child-care and family responsibilities reduce time and personal resources for self-care.

The cumulative effect of disparities in economic status (poverty rates, wage gap), political/decision-making exclusion, and burden of gender roles increases many cardiovascular risk factors including, food insecurity, sedentary lifestyles, obesity, anxiety, and depression.

CONCLUSION



(United Nations, 2015)

The accumulation of the research gap, inferior clinical treatment, wage gap, political exclusion, burdening social roles, and higher rates of poverty disadvantage women on multiple grounds that substantially increase cardiovascular risk. Integration of sex-specific cardiovascular research into clinical practice has been slow at best, which continues to sustain this gap. At the root of all of these disparities is the wide-spread discrimination against women that permeates all sectors and aspects of life on a local to global scale.



Image by Canadian Women's Heart Health Centre, 2018



Image by CDC, 2017



Image adapted from WCH, 2018



Image by SWHR, 2018

TRANSDISCIPLINARY SOLUTIONS

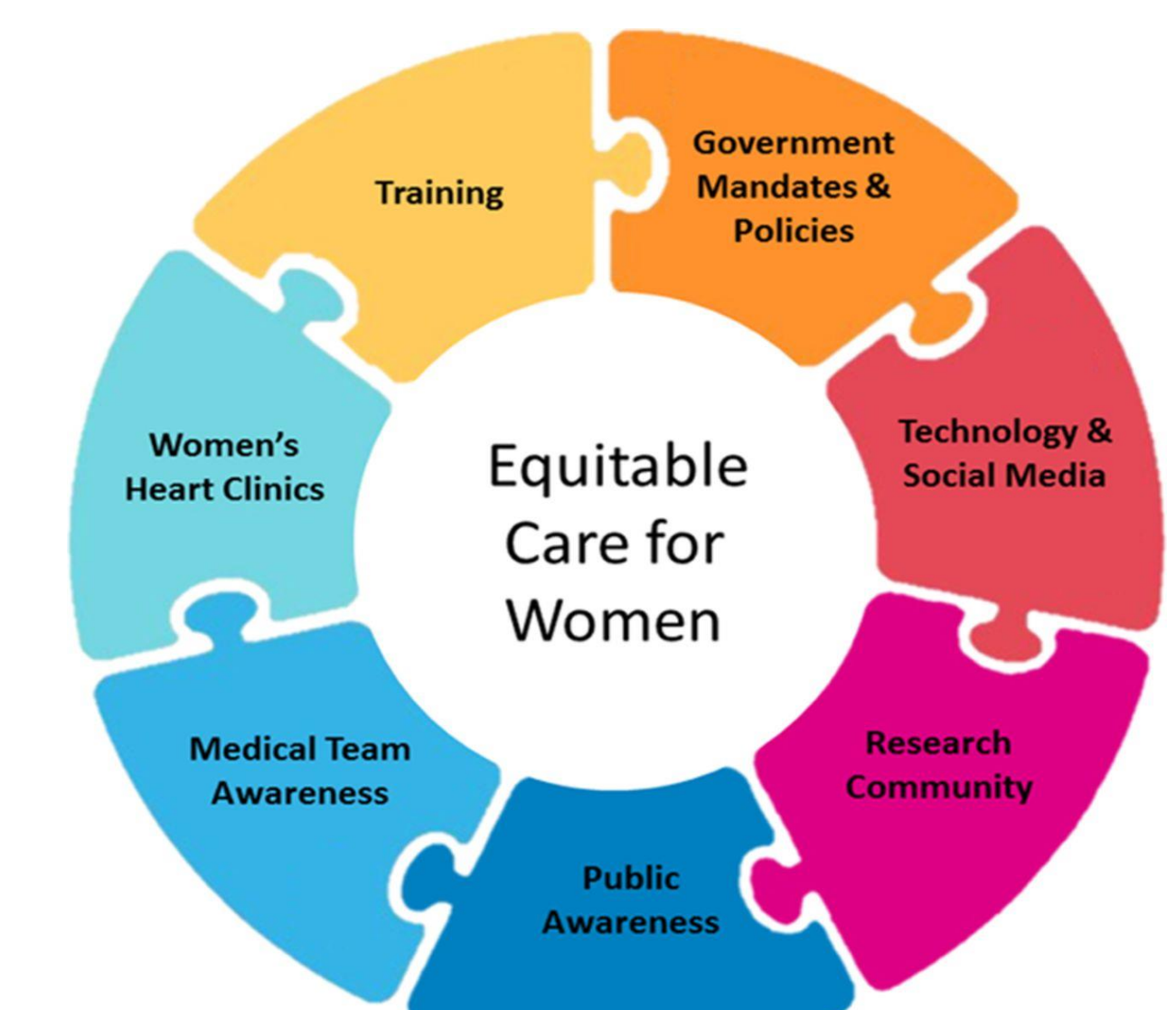


Image by Aggarwal et al., 2018