

# 2022 Best Research Poster Award



## Gender and sex in cardiovascular disease: Biology, bias, or both?

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### INTRODUCTION

Cardiovascular disease (CVD) is often perceived as a male disease. However, it is the leading cause of mortality and morbidity for both men and women.

#### Definitions are important

- Sex refers to biological and anatomical factors.
- Gender refers to cultural and societal factors.

#### Sex-specific risk factors:

Age of menarche, menopause, reproductive endocrine disorders & pregnancy complications ↑ CVD risk in women<sup>(1,2)</sup>.

Diabetes & smoking have been associated with ↑ CVD risk in women<sup>(3,4)</sup>.

#### Gender-specific risk factors:

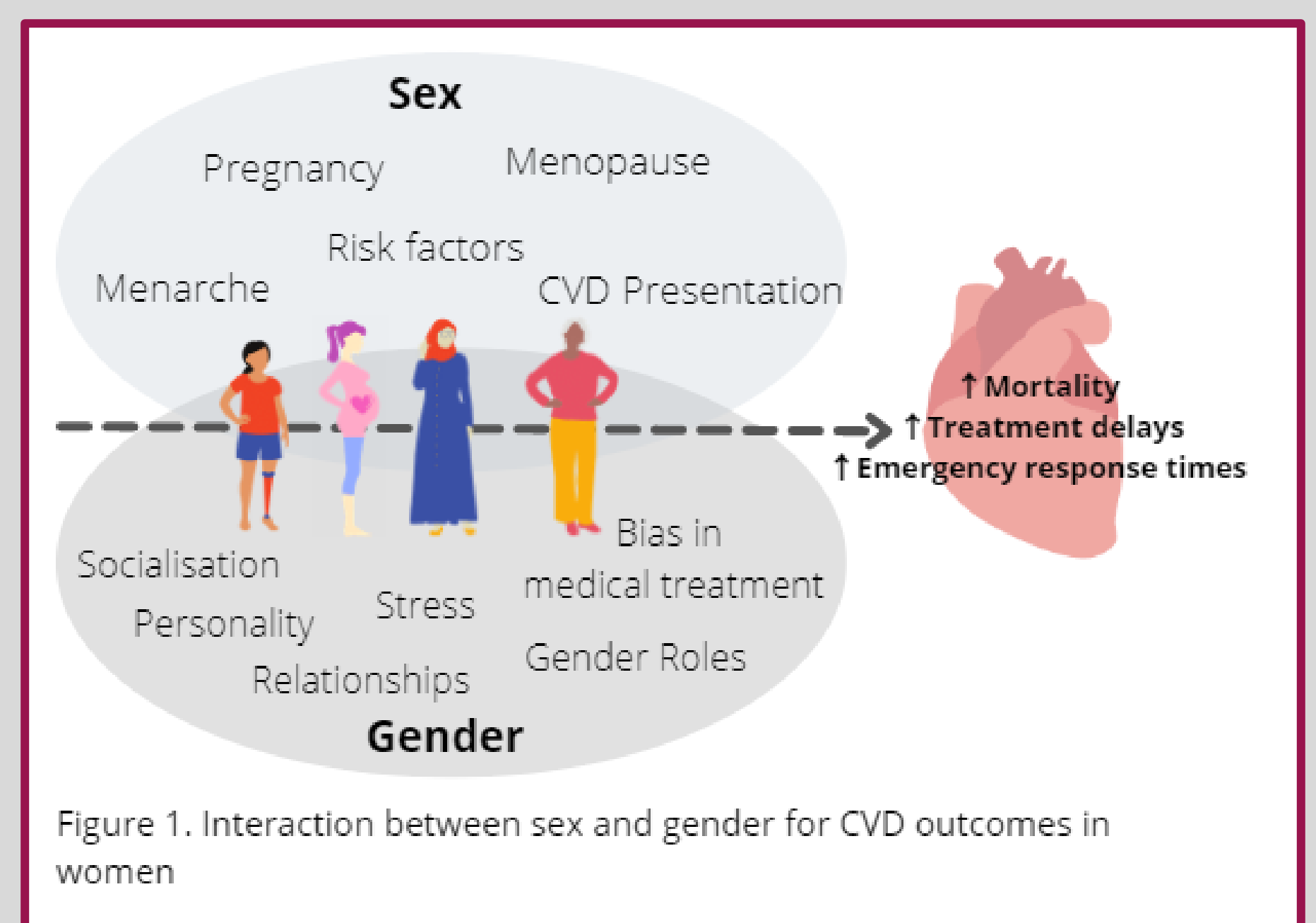
Adoption of health behaviours<sup>(5)</sup>, gender roles & relationships impact CVD risk.

Gender bias in healthcare:

- Delays in treatment for women<sup>(6)</sup>.
- Low referral & attendance to cardiac rehab<sup>(7,8)</sup>.

### RESULTS:

Sex and gender interact, resulting in worse CVD outcomes for women.



#### Sex and Gender in Research:

Women are underrepresented in studies on CVD.

The terms sex & gender are often used interchangeably & incorrectly.

Studies do not always account for sex or gender differences.

### OBJECTIVES

We aimed to explore the literature on how sex and gender contribute to the disparity of CVD outcomes in women.

### METHOD

1. Search the literature for studies exploring sex, gender and CVD
2. Complete narrative review
3. Develop recommendations



### RECOMMENDATIONS

#### Clinical Practice:

Address biases at individual, service and societal levels through education

Offer patient-centred care

Women-focused programs like cardiac rehabilitation

#### Research:

Include both sex & gender-related variables

Intersectional analyses

Include gender-diverse populations

Use correct definitions

### DISCUSSION /CONCLUSION

There are sex and gender differences in the risk, presentation, treatment, and research of CVD.



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