



Project for an **O**ntario **W**omen's Health **E**vidence-Based **R**eport

Burden of Illness

Chapter 3

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Cynthia Damba, Janice Dusek, Susan K. Shiller, Yingzi Li, Stephanie Ross,
Gabriel Shapiro, Douglas Manuel.



Improving Women's
Health in Ontario

Pour l'amélioration de la
santé des Ontariennes

ST. MICHAEL'S HOSPITAL

A teaching hospital affiliated with the University of Toronto

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**Institute for Clinical
Evaluative Sciences**

Burden of Illness

Chapter 3



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INSIDE

- Health and Functional Status
- Chronic Disease Risk Factors
- Chronic Conditions
- Sexually-transmitted Infections
- Mortality



Project for an Ontario Women's Health Evidence-Based Report

A Tool for Monitoring and Improvement

The **P**roject for an **O**ntario **W**omen's Health **E**vidence-Based **R**eport (**POWER**) will serve as a tool to help policymakers and providers to improve the health of and reduce inequities among the women of Ontario.

Uses for POWER Study

- Priority Setting
- Building the Evidence Base
- Informing Practice and Policy
- Tool for Improvement
- Integrating Equity into Planning and Quality Improvement

Stakeholder Consultations

- Power Study Roundtables
- Consumers: representatives of community based groups and associations
- Providers: clinicians, government, health data agencies, LHINs, CHCs, CCACs
- Range of areas and interests
 - Especially cancer, cardiovascular, and depression
 - Some representation from outside GTA

Ontario Women's Health Equity Report

Volume 1

- Burden of Illness
- Cancer
- Depression
- Cardiovascular disease
- Access to Health Care
- Conclusions and Policy Implications

Volume 2

- Diabetes
- HIV Infection
- Musculoskeletal Disorders (arthritis, osteoporosis)
- Reproductive and Gynecological Health
- Special Populations (low income, immigrant and older women)
- Social Determinants of Health

Interactive data cube

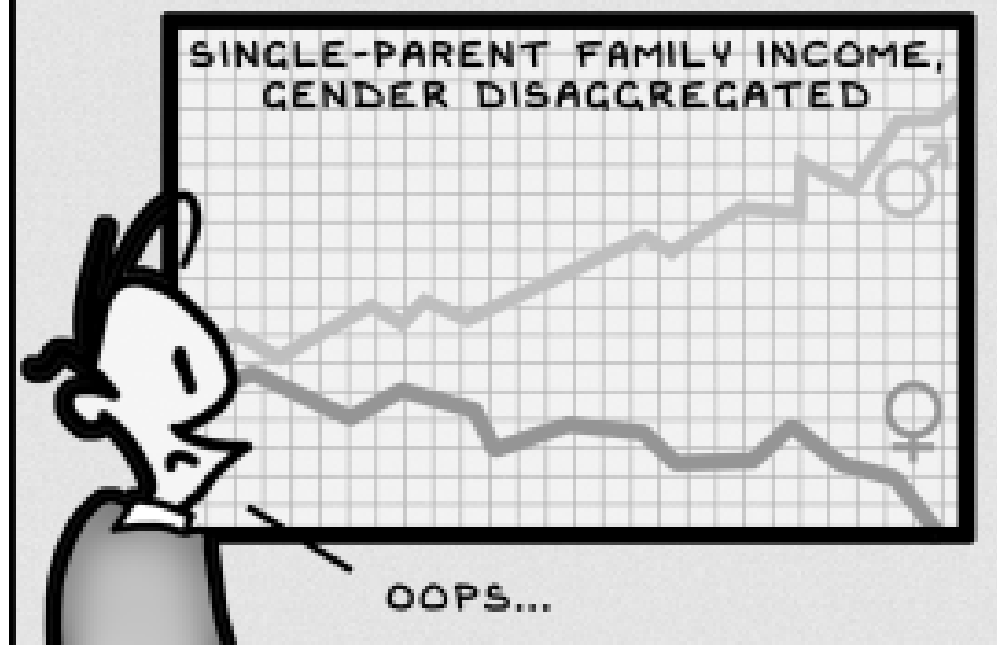
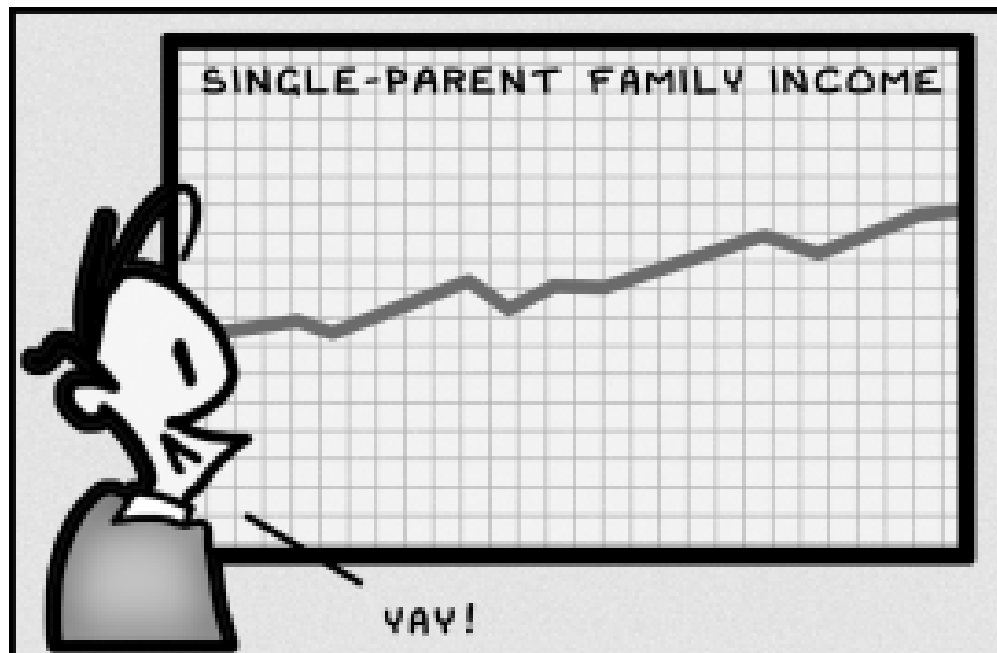
Measuring and Monitoring Gender Differences in Health and Health Care

Women and men have very different:

- Patterns of illness, morbidity, and mortality
- Social contexts
- Experiences with health care

Health inequities among women associated with:

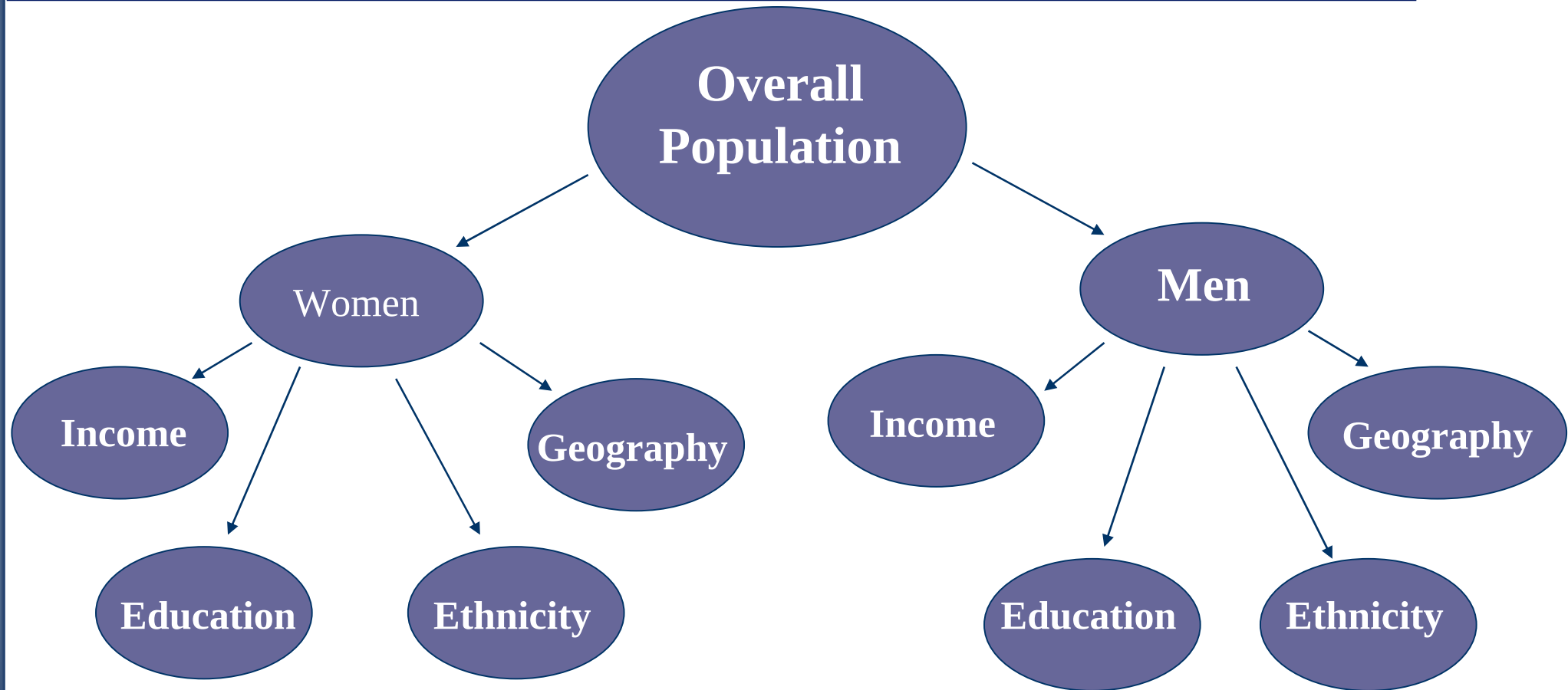
- Socioeconomic position
- Ethnicity
- Geography



Women's Health Reporting: Developing a New Model

- The Ontario Women's Health Equity Report can serve as a model for
 - incorporating gender and equity as an integral component of improvement efforts;
 - focusing on the need to integrate efforts to improve population health and health care services;
 - building upon evidence-based analyses to provide new information on factors and pathways contributing to gender and socioeconomic differences in health outcomes.

Assessing Equity



Health Indicator Measurement and Reporting: A Tool to Drive Change

Health indicator measurement and reporting provide essential tools for informing and monitoring efforts to:

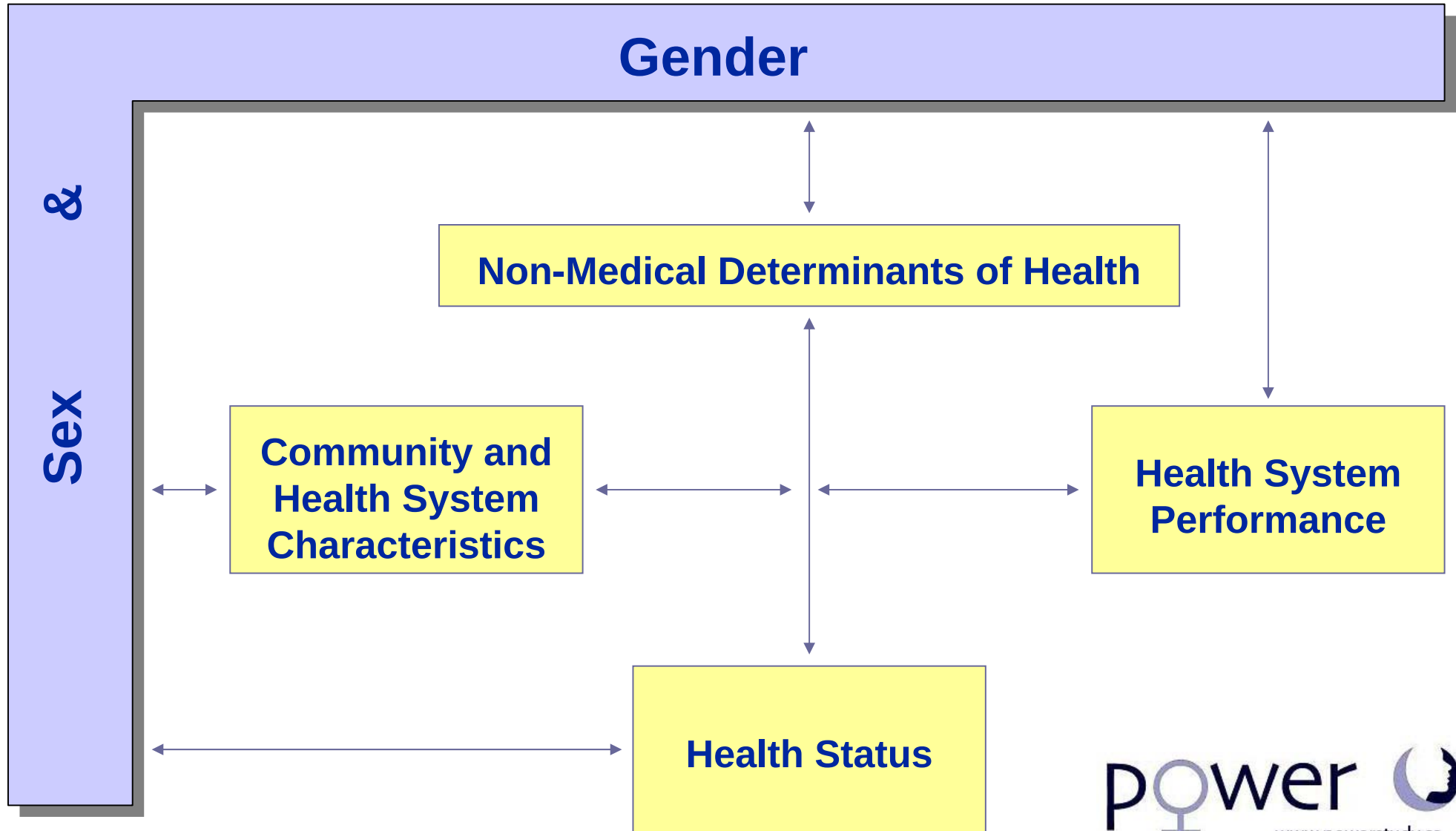
- Improve population health
- Improve access to quality and outcomes of health care services
- Reduce inequities in health and health care

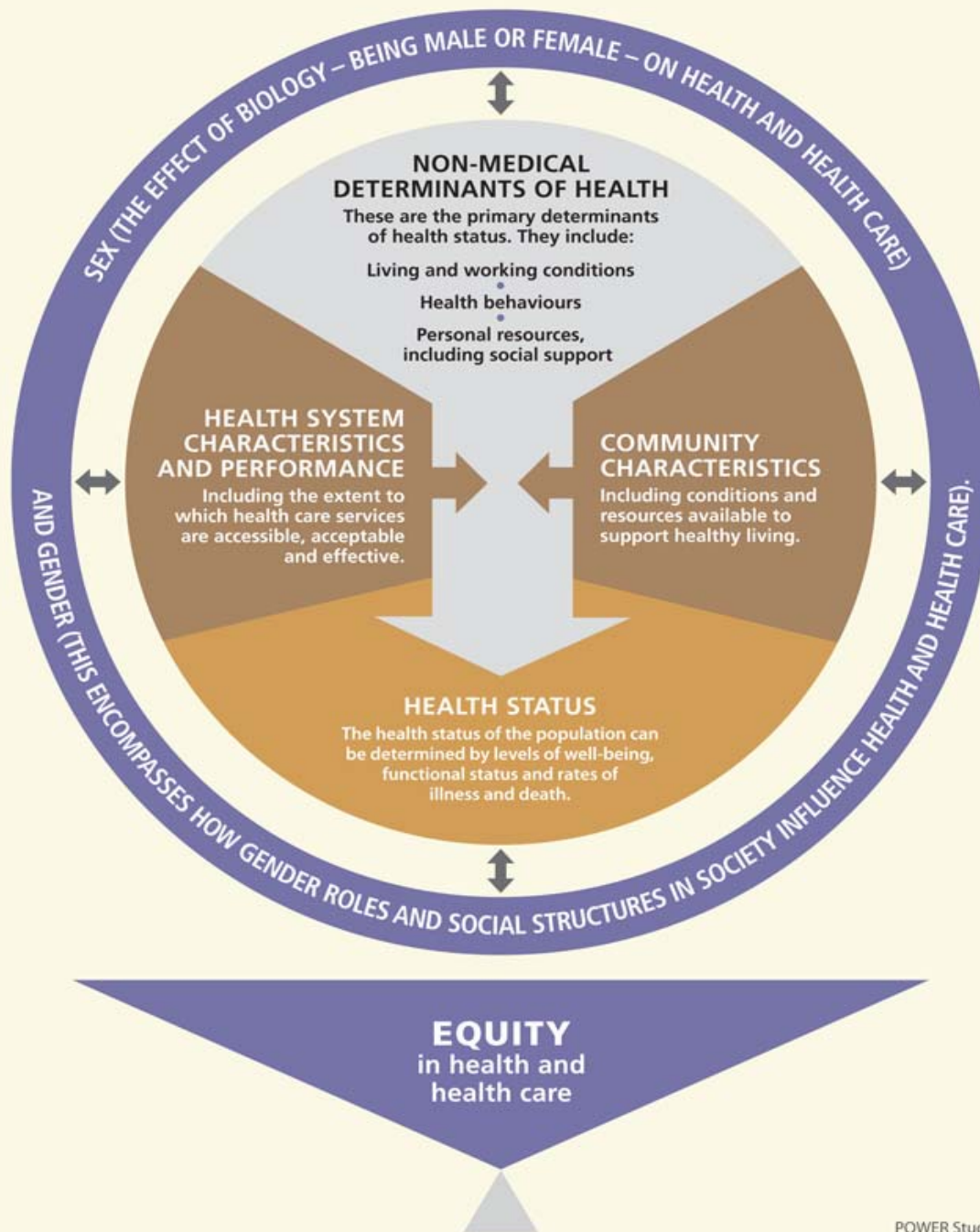
Effecting Change . . .

- Reporting by itself does not result in improvement.
- For performance measurement and reporting to result in change it needs to be evidence-based, strategy driven, linked to a commitment for change by health system leaders and providers, and mechanisms for accountability.

-
- POWER Study Women's Health Equity Framework

Women's Health Indicator Framework





POWER Study Gender and Equity Health Indicator Framework

Indicators from the Burden of Illness chapter

■ Health and Functional Status

- Global health (self-rated health)
- Self-rated mental health
- Activity limitations
- Limitations in Instrumental Activities of Daily Living (IADLs) and Activities of Daily Living (ADLs)
- Activities prevented by pain
- Hospitalization rates due to fall-related injury among seniors

Indicators...

■ Chronic Disease Risk Factors

- Lower income
- Lower education
- Food insecurity
- Health behaviours that increase the risk of chronic disease
 - Physical inactivity
 - Inadequate fruit and vegetable intake
 - Overweight / obesity
 - Smoking

Indicators...

■ Chronic Conditions

- Prevalence
 - Hypertension
 - Arthritis
 - Obstructive lung disease
 - Diabetes
 - Heart disease or stroke
 - Urinary incontinence
- Prevalence of depression
- Prevalence of multiple (2 or more) chronic conditions

Indicators...

- Sexually Transmitted Infections
 - Incidence
 - Chlamydia
 - Gonorrhea
 - Number of prevalent HIV cases
 - HIV risk factors
 - AIDS incidence
 - Prenatal HIV testing

Indicators...

■ Mortality

- All-cause mortality rate
- Premature mortality (deaths before age 75)
- Excess death before age 75
- Potential Years of Life Lost (PYLLs) *75
- Chronic disease mortality rate
 - Ischemic heart disease
 - Cerebrovascular disease
 - Other circulatory diseases
- Pneumonia mortality rate
- Mortality rate from trauma and injury
- Life expectancy at birth
- Life expectancy at age 65
- Disability-free life expectancy

LHIN-level analysis

- All indicators with the exception of those reported on mortality were available at the regional (LHIN level)
- LHINs have received their data on:
 - Self-rated health (percentage of population reporting fair or poor health)
 - Self-rated mental health
 - Percentage of population reporting activity limitations
 - Percentage of population IADL and/or ADL limitations
 - Fall-related hospitalization rate
 - Prevalence of heart disease and/or stroke
 - Prevalence of diabetes
 - Prevalence of urinary incontinence
 - Physical inactivity
 - Inadequate fruit and vegetable intake
 - Smoking

Burden of Illness Chapter

LHIN-level data availability

Data available for LHIN, LHIN and age, LHIN and income, LHIN and education

- Self-rated health (fair/poor)
- Prevalence of activity limitations
- Prevalence of limitations in Instrumental Activities of Daily Living (IADL) or basic Activities of Daily Living (ADL)
- Hospitalization due to fall-related injury among seniors (education unavailable)

- Inadequate fruit/vegetable intake
- Smoking
- Physical inactivity
- Overweight or obesity

- Arthritis
- High blood pressure (hypertension)
- Prevalence of multiple chronic conditions

Burden of Illness Chapter

LHIN-level data availability

Data available at LHIN level only

- Self-rated mental health (fair/poor)
- Asthma
- Heart disease and stroke
- Diabetes
- Lower income
- Lower education

LHIN-level data unavailable

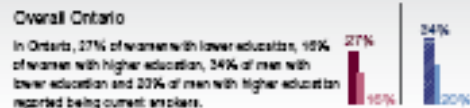
- Activities prevented by pain
- Food insecurity
- Urinary incontinence
- Depression
- Sexually transmitted infections
- Mortality

EXHIBIT 3B.10 | Age-standardized percentage of adults aged 25 and older who reported being daily or occasional smoker, by sex, education level and Local Health Integration Network (LHIN), in Ontario, 2005

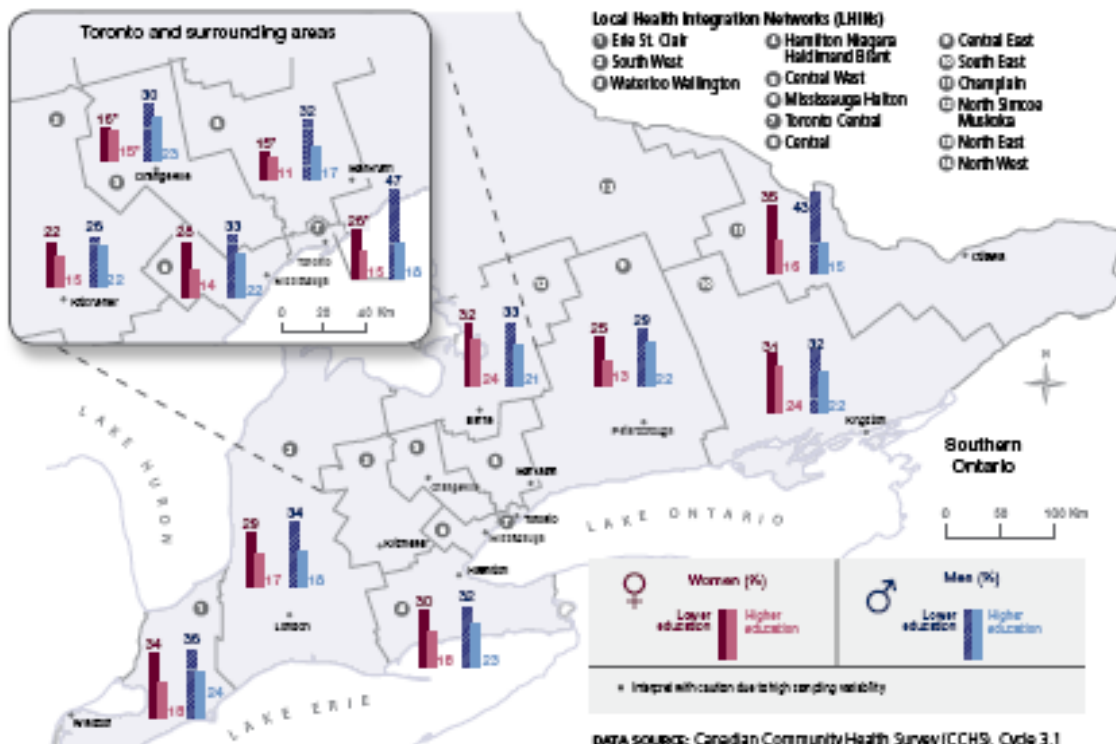
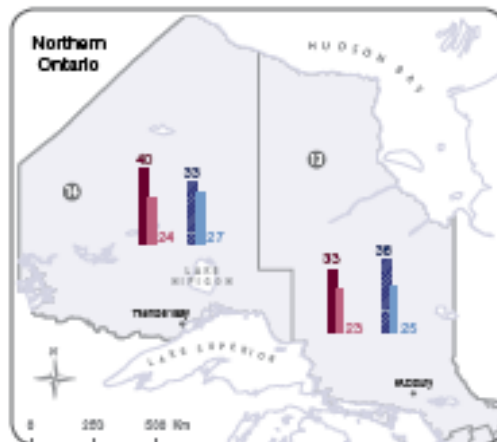
FINDINGS

- There was variation across LHINs in the percentage of adults who reported being current smokers.
- Reported smoking behaviour varied with education level, ranging from 11 percent in more educated women (in the Central and North West LHINs, respectively) and 15 percent in more educated men (in the Champlain and Toronto Central LHINs, respectively).
- The magnitude of the difference between women and men with similar levels of education varied across LHINs.

POWER Study



Note: Lower education denotes secondary school graduation or less



DATA SOURCE: Canadian Community Health Survey (CCHS), Cycle 3.1

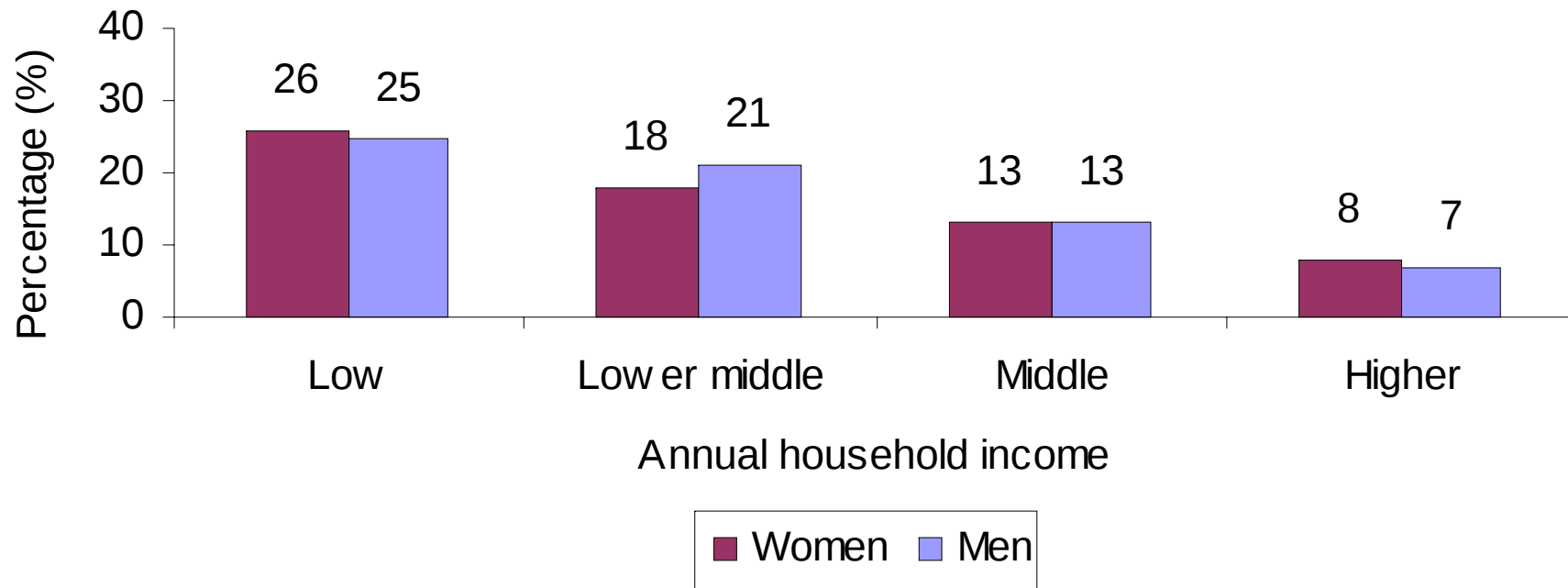
Age-standardized percentage of adults aged 25 and older who reported being a daily or occasional smoker, by sex, education level and Local Health Integration Network, in Ontario, 2005

Uses for POWER Study

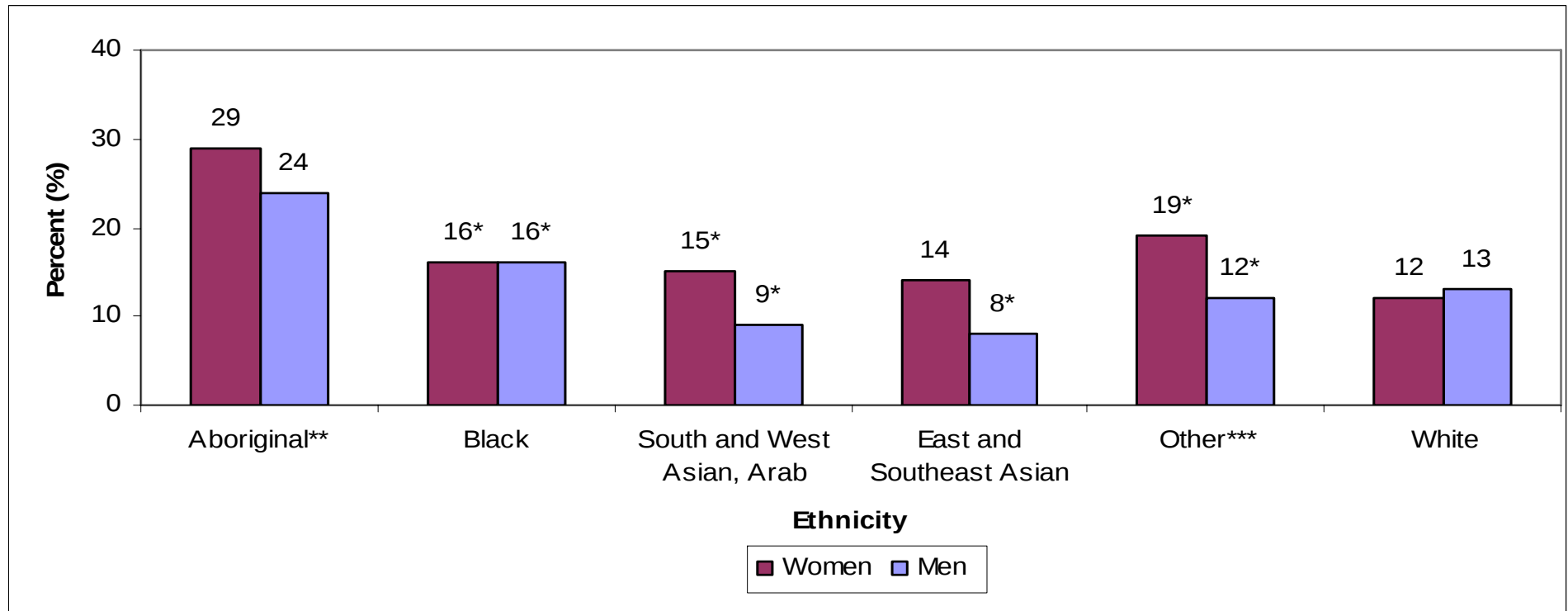
- Priority Setting
- Building the Evidence Base
- Informing Practice and Policy
- Tool for Improvement
- Integrating Equity into Planning and Quality Improvement

■ Health and Functional Status

Age-standardized percentage of adults aged 25 and older who reported their health as fair or poor, by annual household income and sex, 2005



Age-standardized percentage of adults aged 25 years and older who reported their health as fair or poor, by ethnicity and sex, in Ontario, 2005



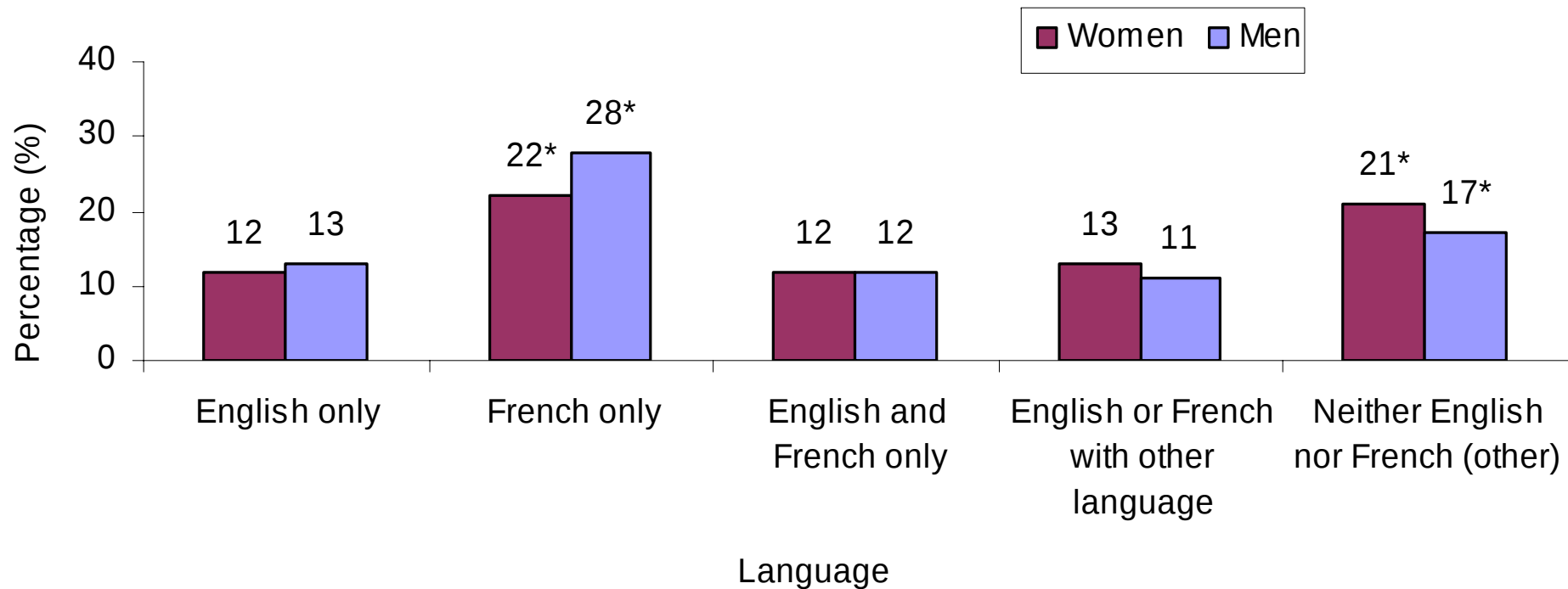
Data source: Canadian Community Health Survey 3.1

*Interpret with caution due to high sampling variability (coefficient of variation 16.6–33.3)

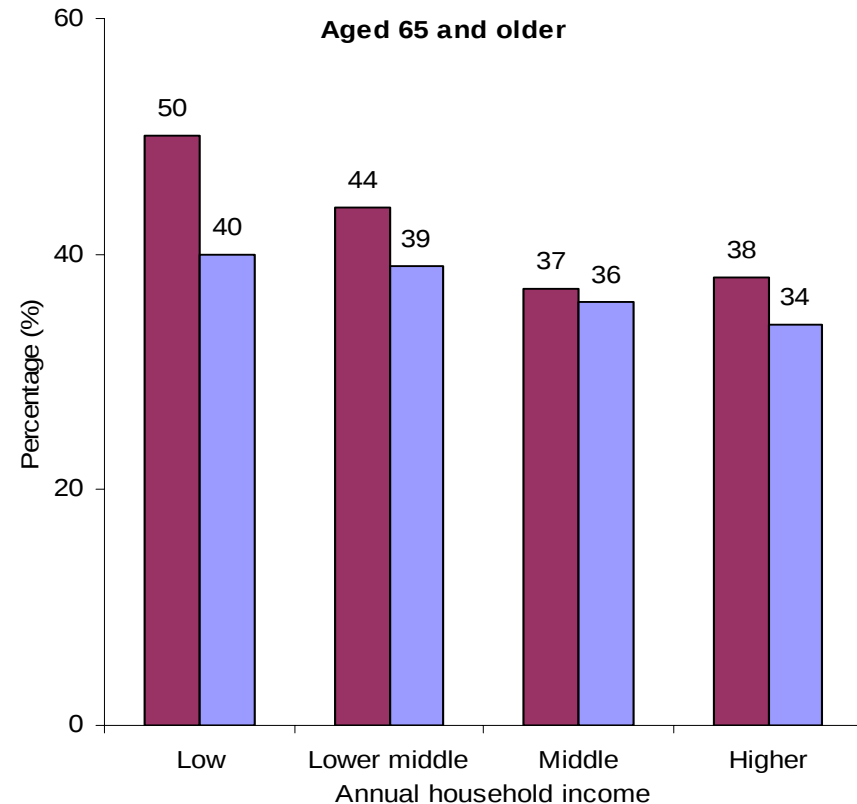
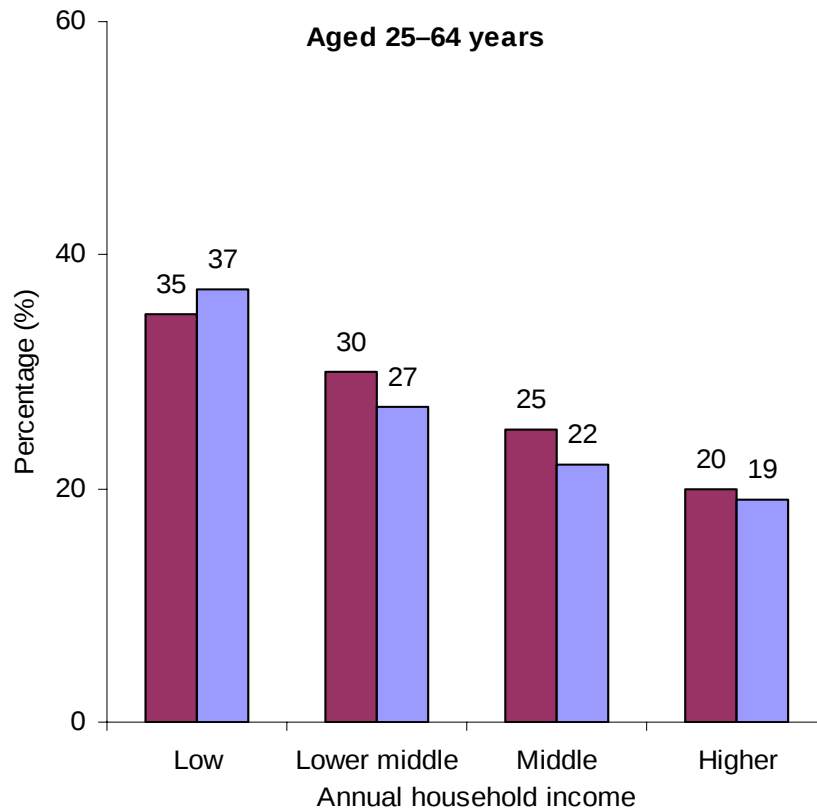
**Only includes off-reserve Aboriginals (North American Indian, Metis, Inuit)

***Includes Latin American, other racial and multiple racial origins.

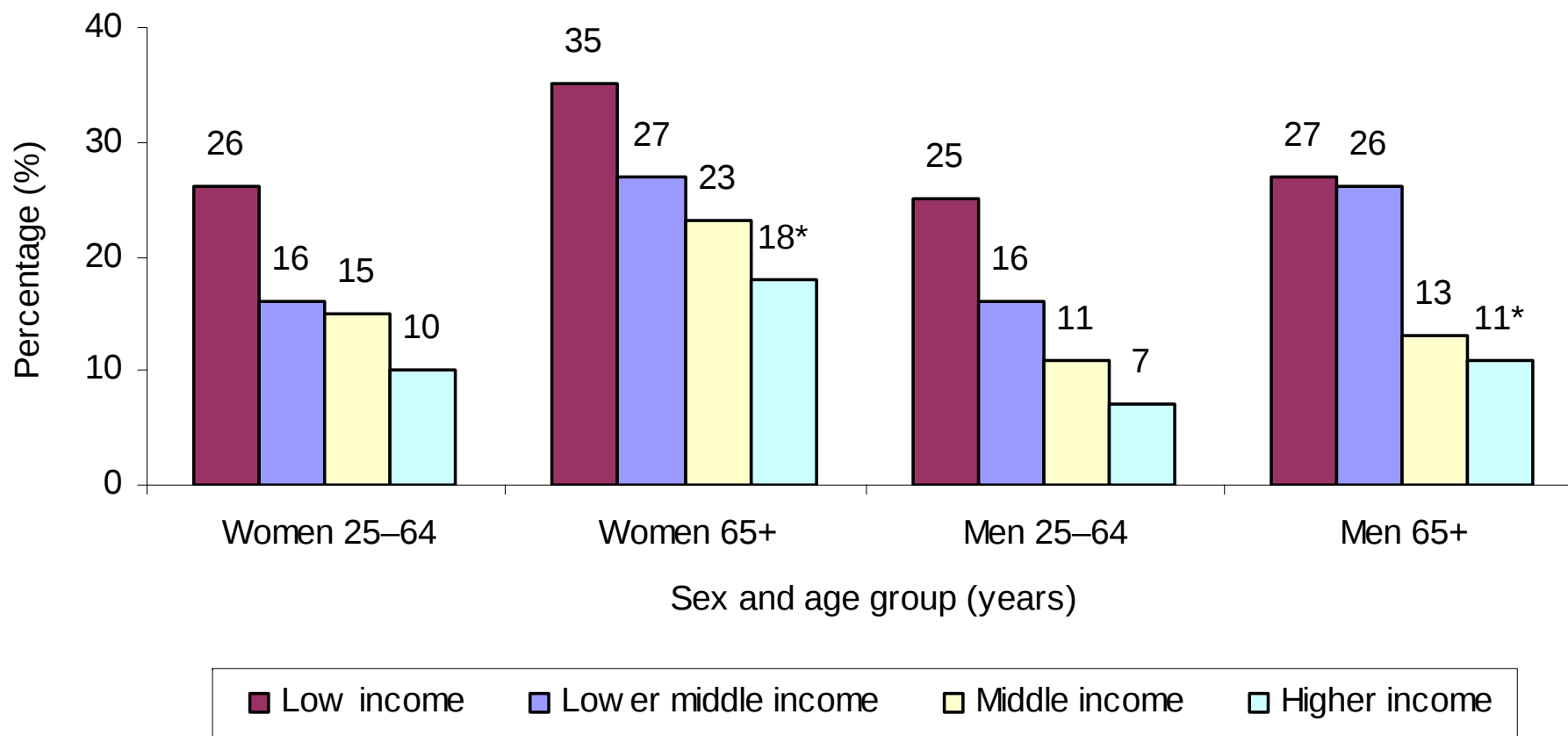
Age-standardized percentage of adults aged 25 years and older who reported their health as fair or poor, by sex and language, in Ontario, 2005



Age-specific percentage of adults aged 25 years and older who reported having activity limitations, by sex and annual household income, in Ontario, 2005

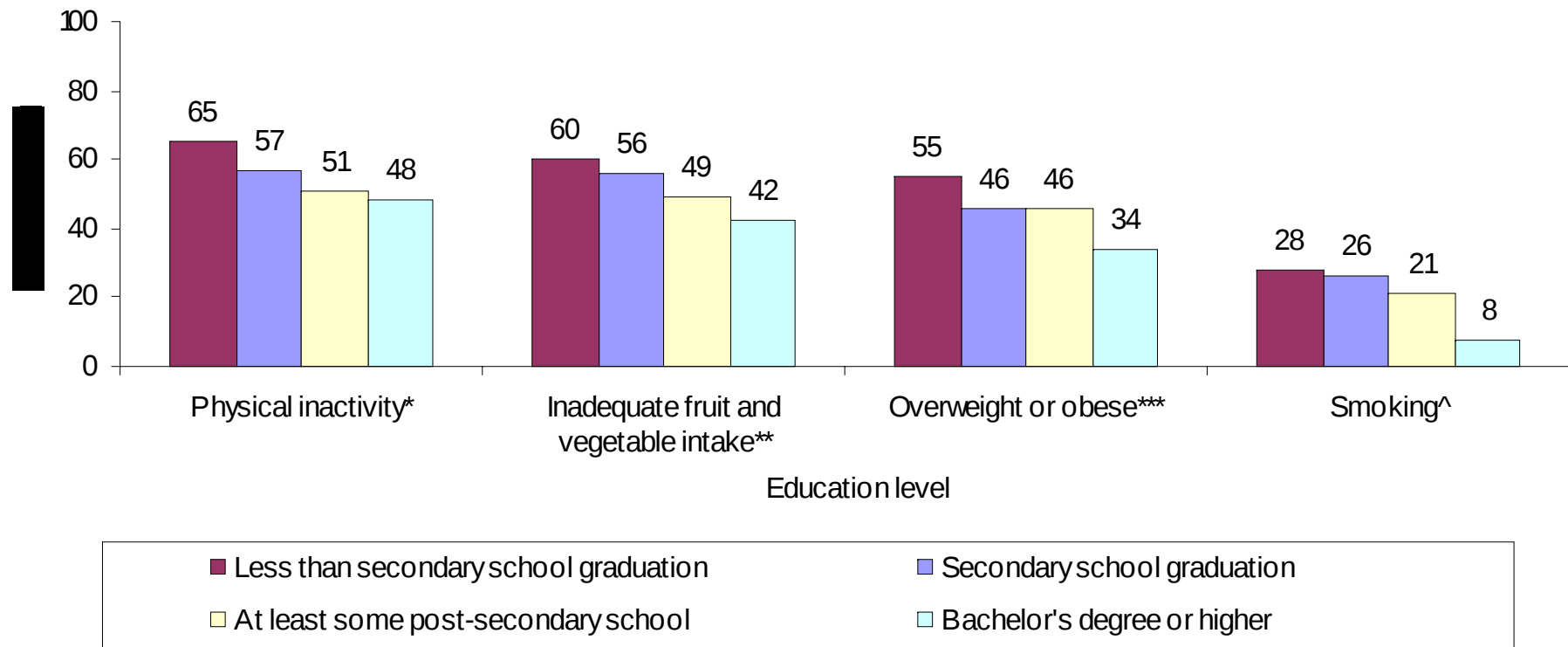


Age-specific percentage of adults aged 25 years and older who reported that their activities were prevented due to pain or discomfort, by sex and annual household income, in Ontario, 2000/01

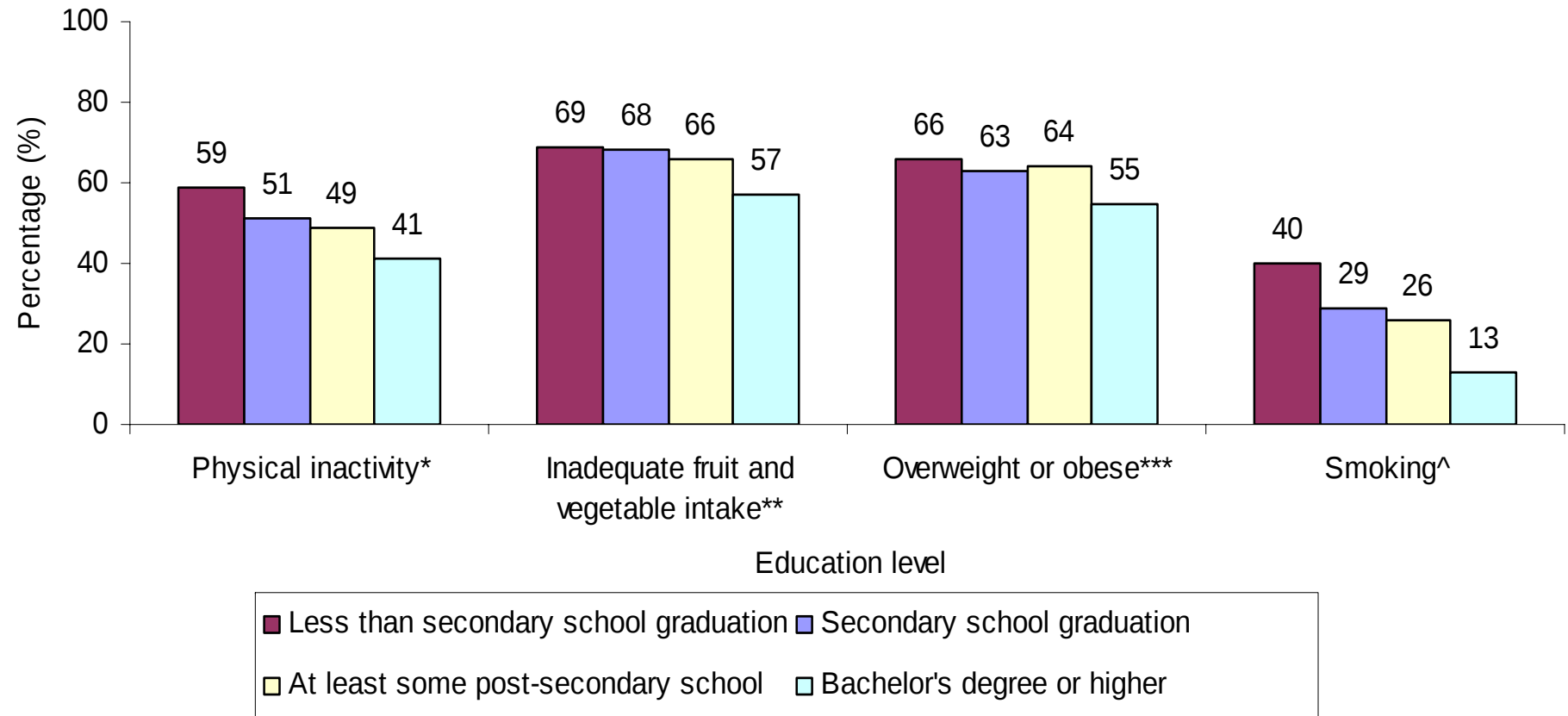


- Chronic disease risk factors

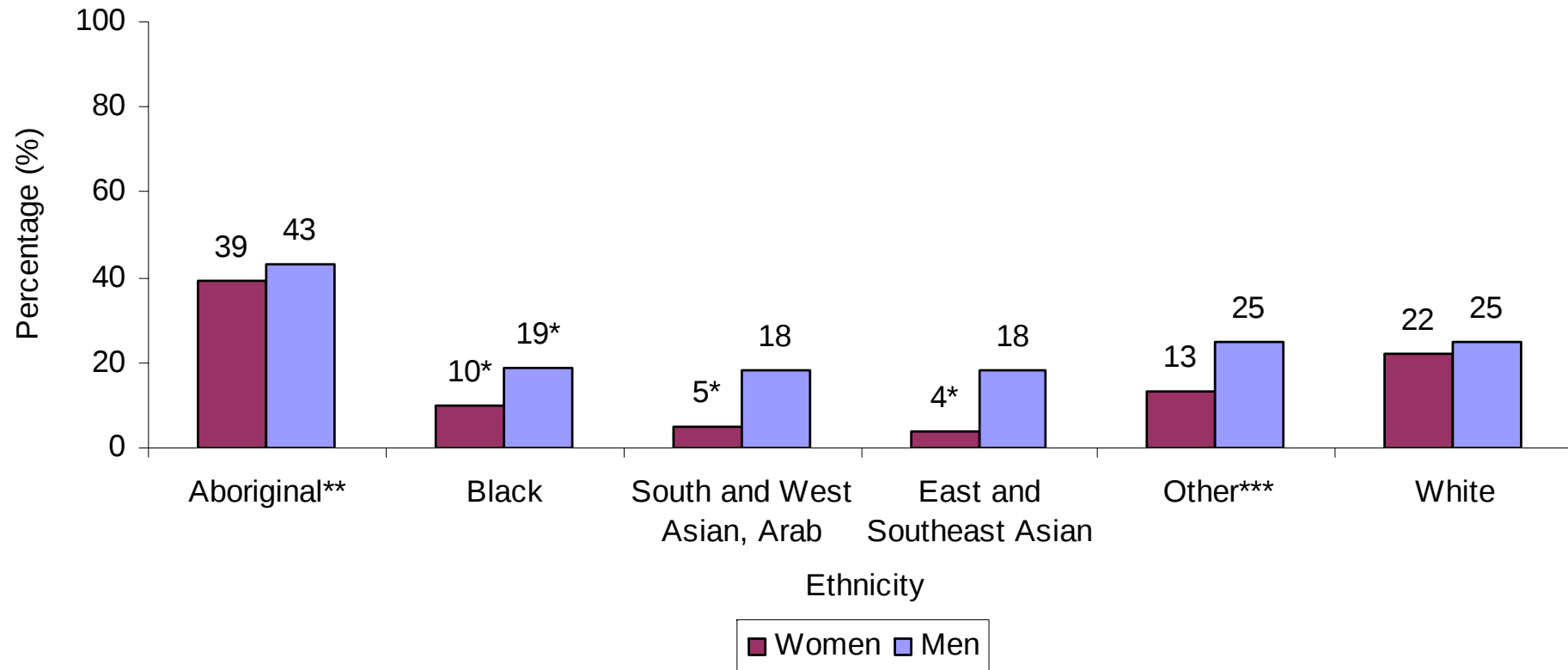
Age-standardized percentage of women aged 25 and older who reported health behaviours that increase the risk of chronic diseases, by sex and education level, in Ontario, 2005



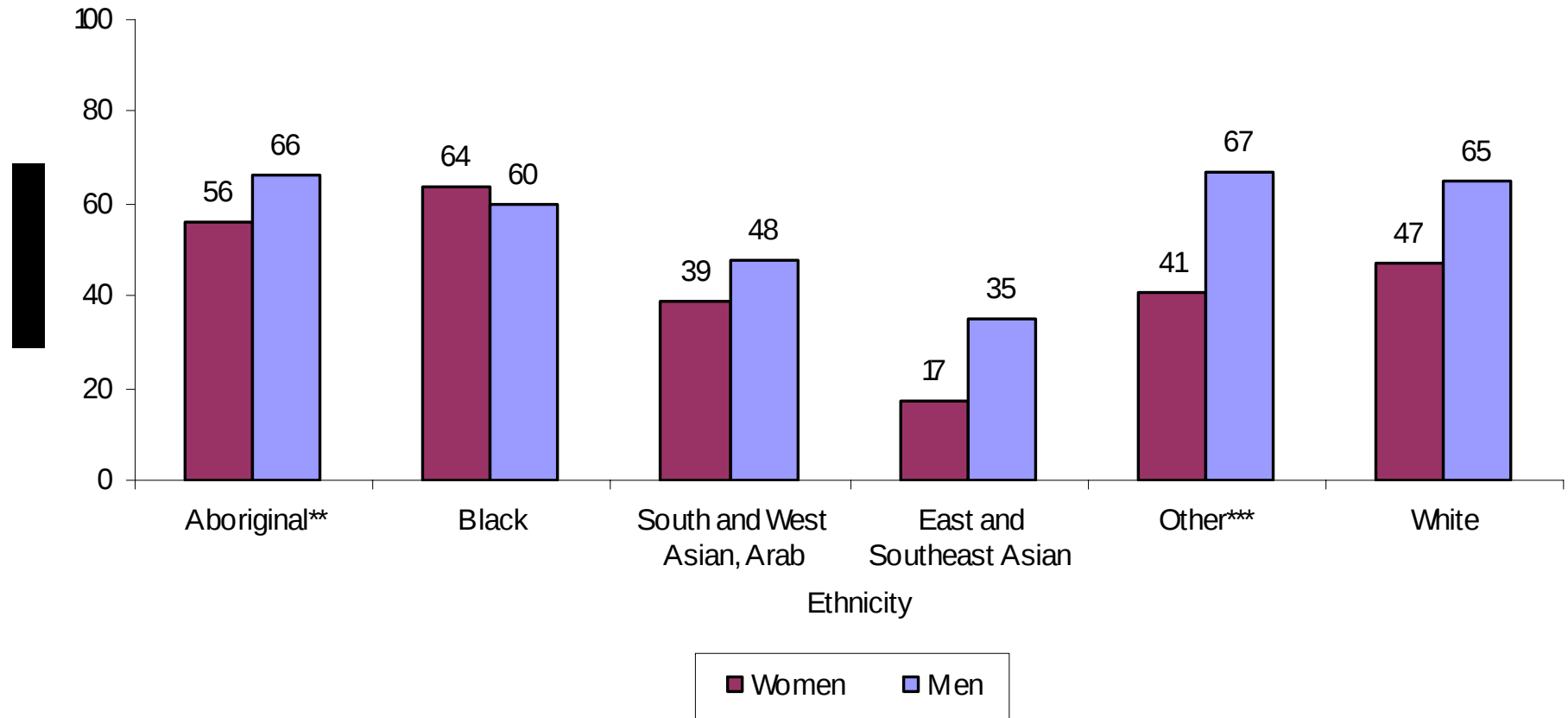
Age-standardized percentage of men aged 25 and older who reported health behaviours that increase the risk of chronic diseases, by sex and education level, in Ontario, 2005



Age-standardized percentage of adults aged 25 years and older who reported being current smokers, by sex and ethnicity, in Ontario, 2005

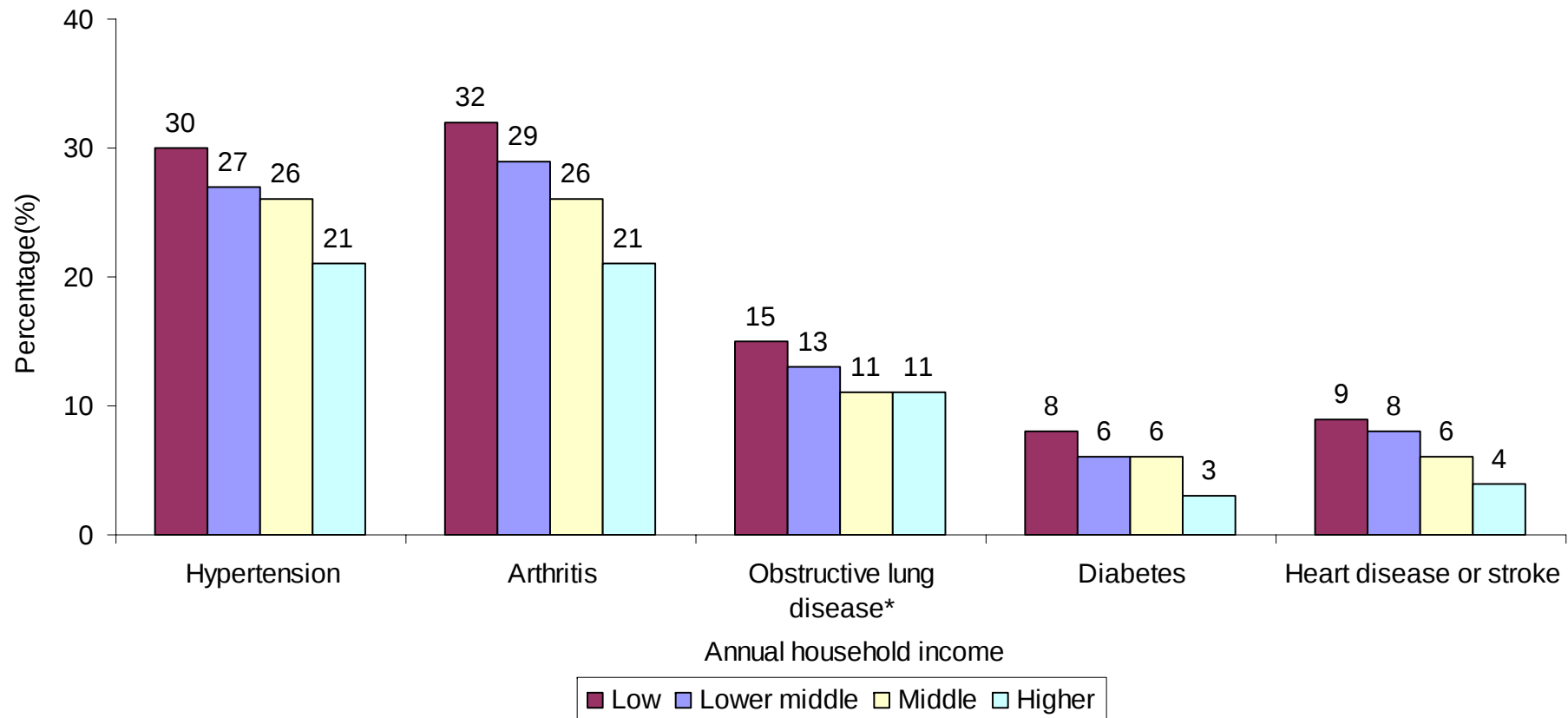


Age-standardized percentage of adults aged 25 years and older who reported being overweight or obese, by sex and ethnicity, in Ontario, 2005

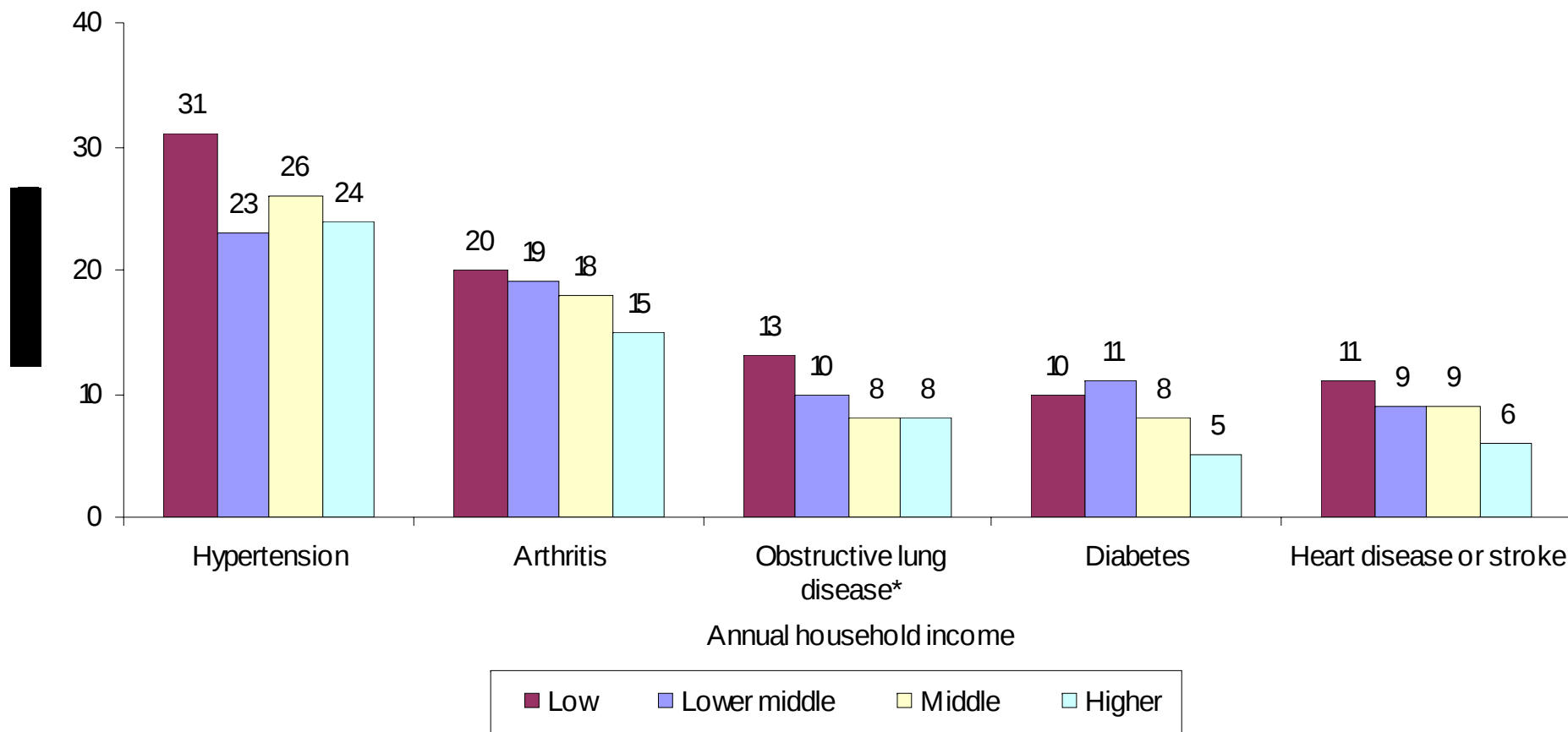


- Prevalence of chronic conditions

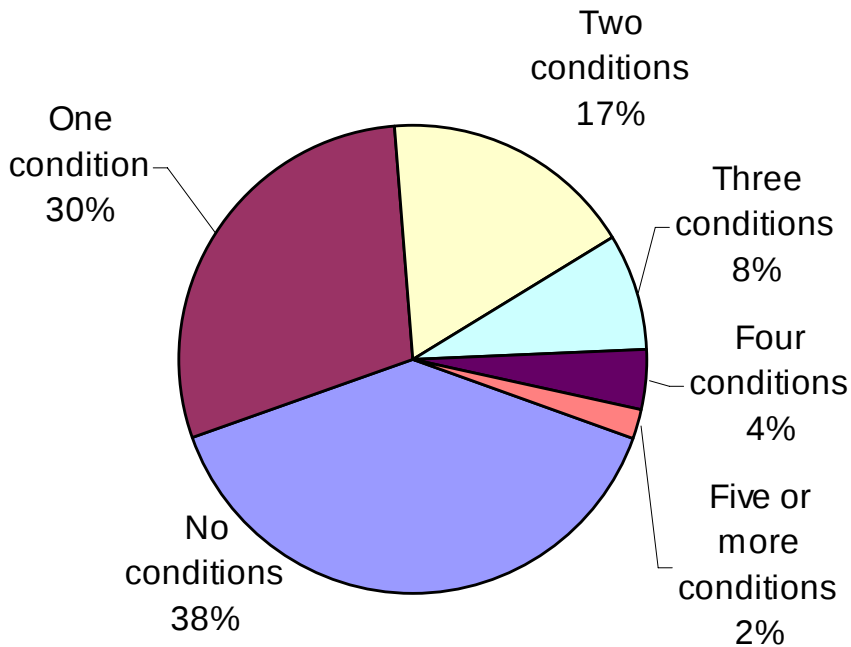
Age-standardized percentage of women aged 25 and older who reported having selected chronic diseases, by sex and annual household income, in Ontario, 2005



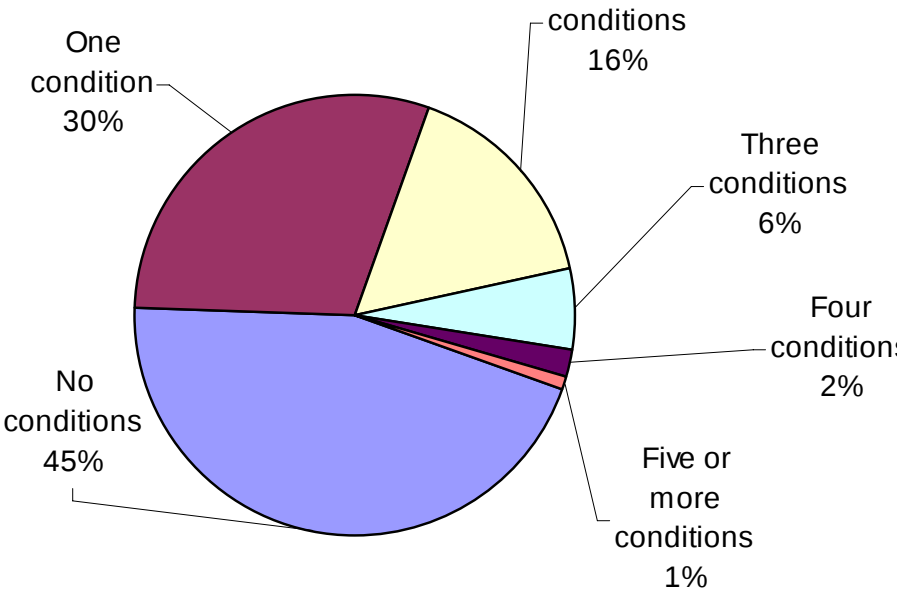
Age-standardized percentage of men aged 25 and older who reported having selected chronic diseases, by sex and annual household income, in Ontario, 2005



Age-standardized percentage* of the population aged 25 years and older, by sex and number of chronic conditions, in Ontario, 2005



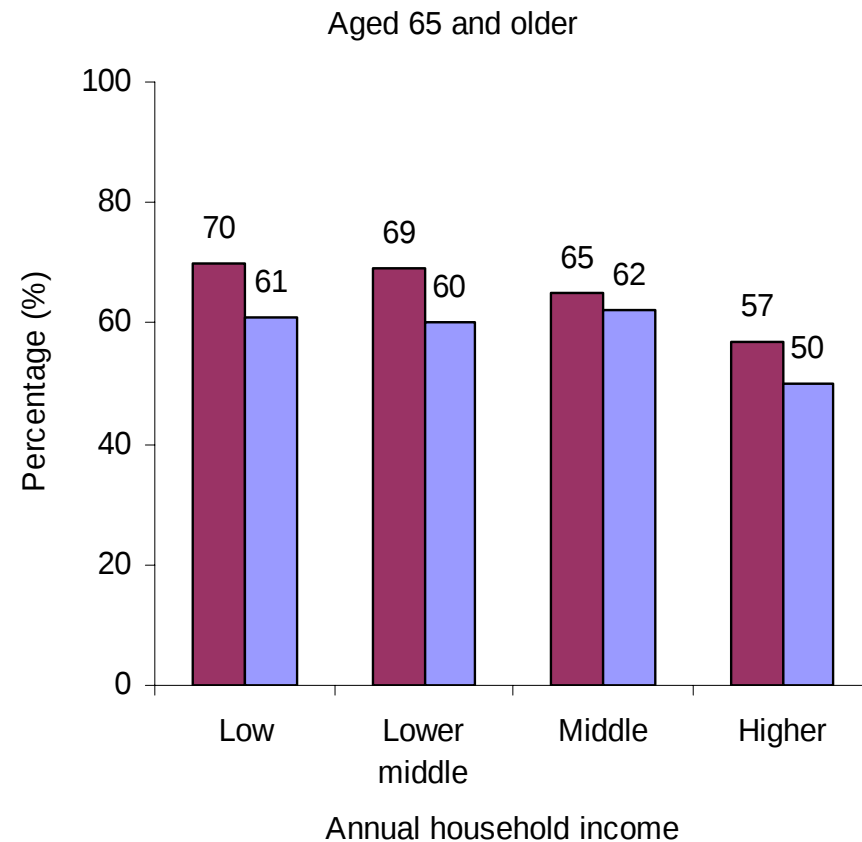
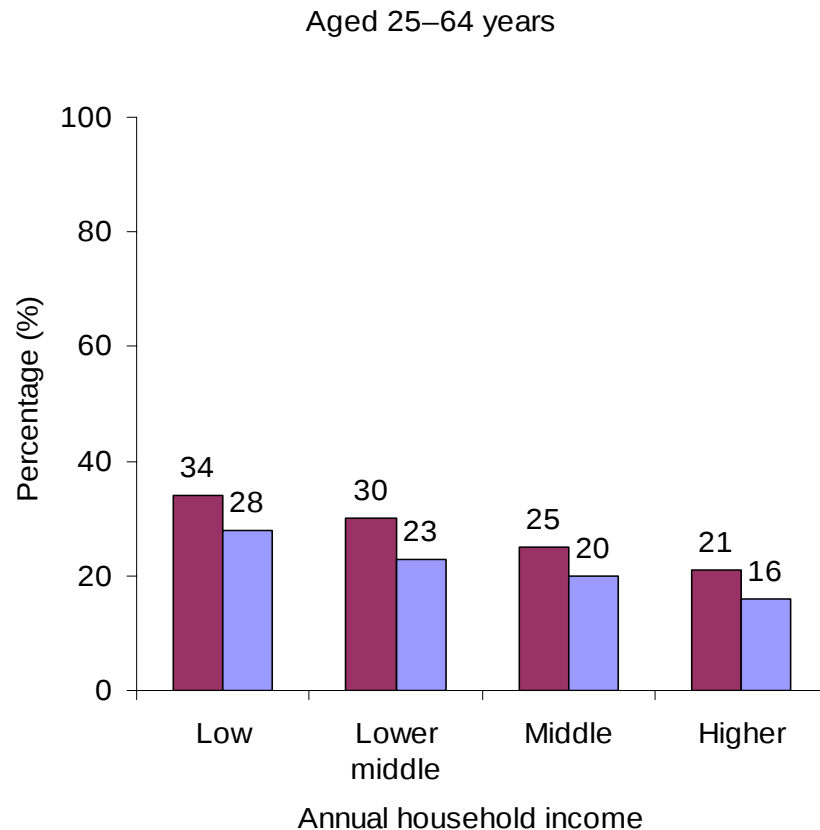
Women



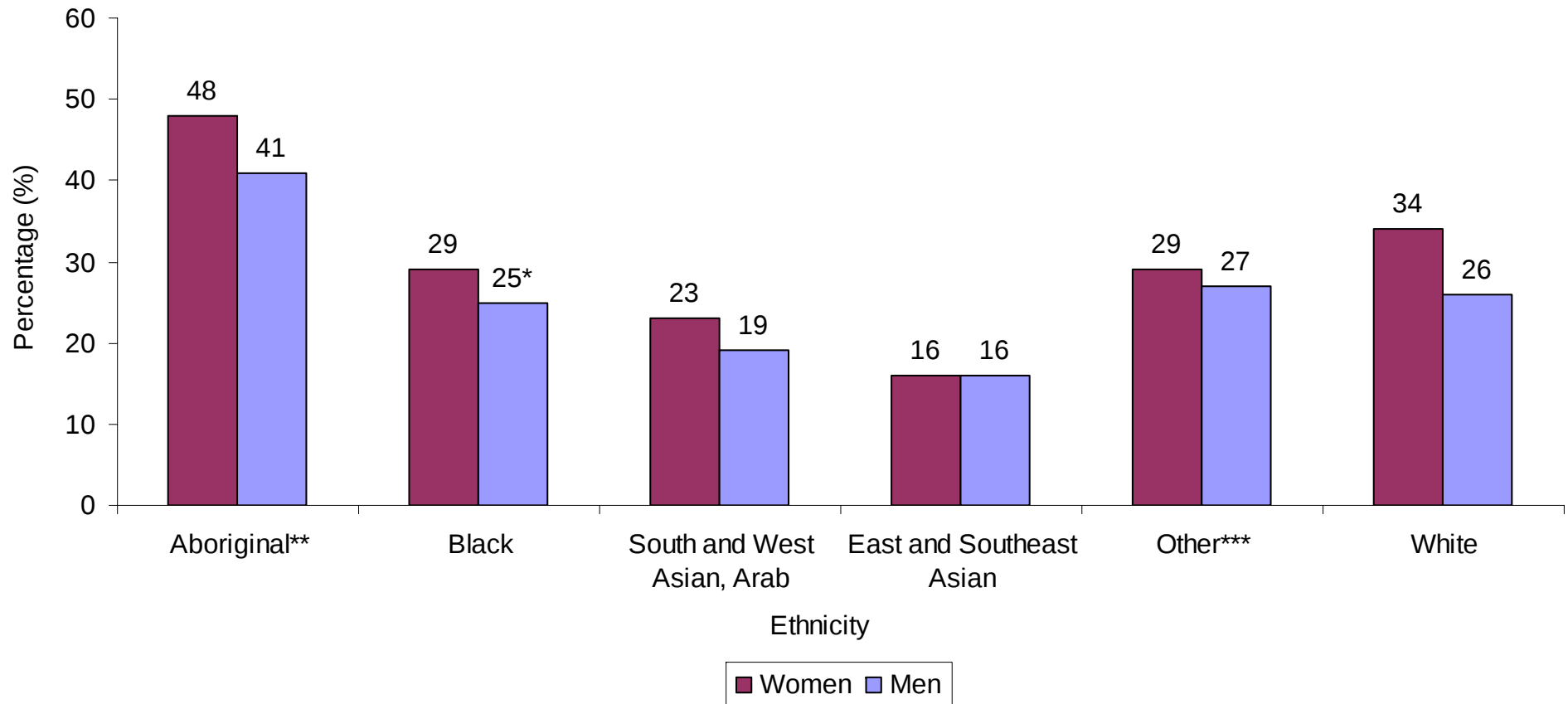
Men

Data source: Canadian Community Health Survey cycle, 3.1

Age-specific percentage of adults aged 25 years and older who reported having two or more chronic conditions, by sex and annual household income, in Ontario, 2005

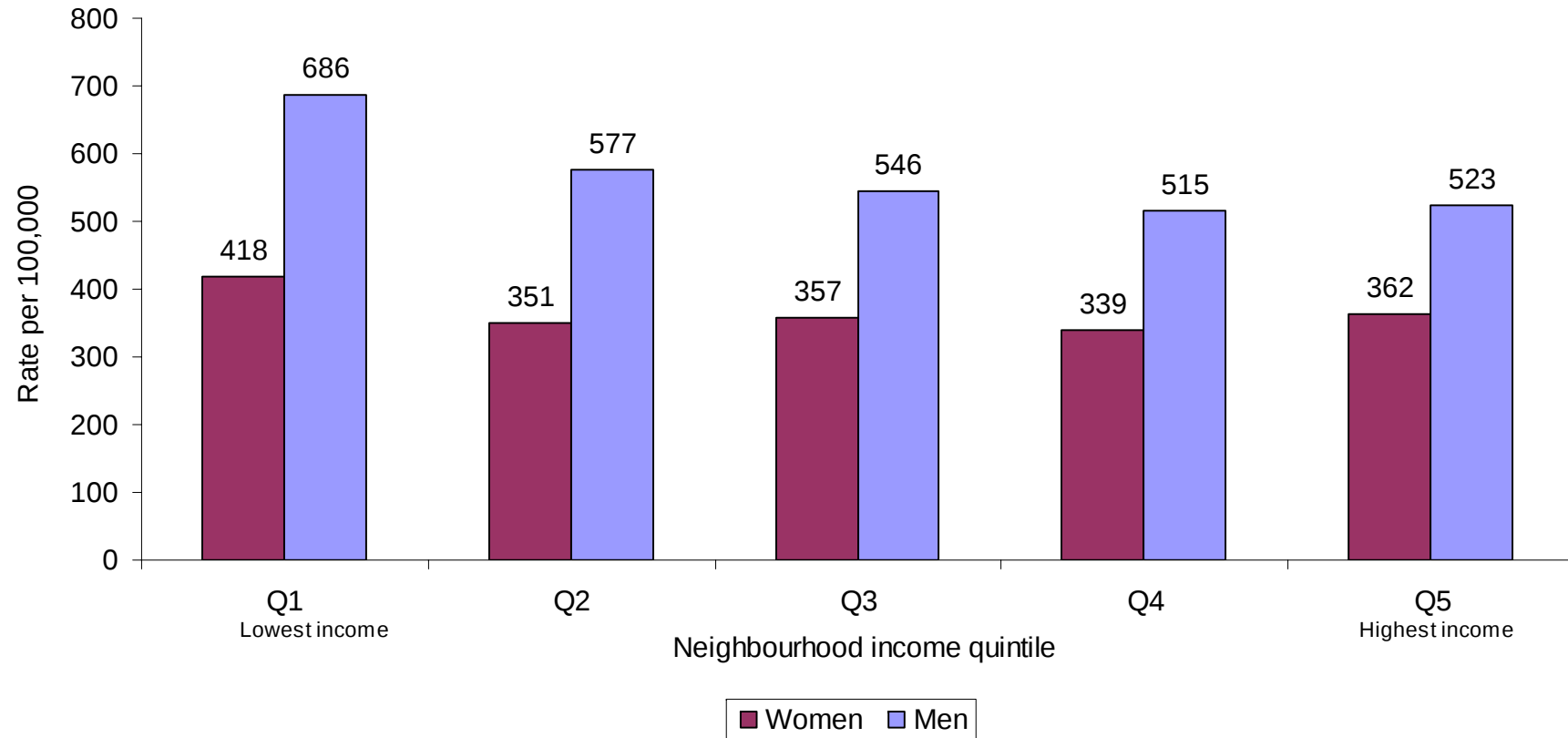


Age-standardized percentage of adults aged 25 years and older who reported having two or more chronic conditions, by sex and ethnicity, in Ontario, 2005

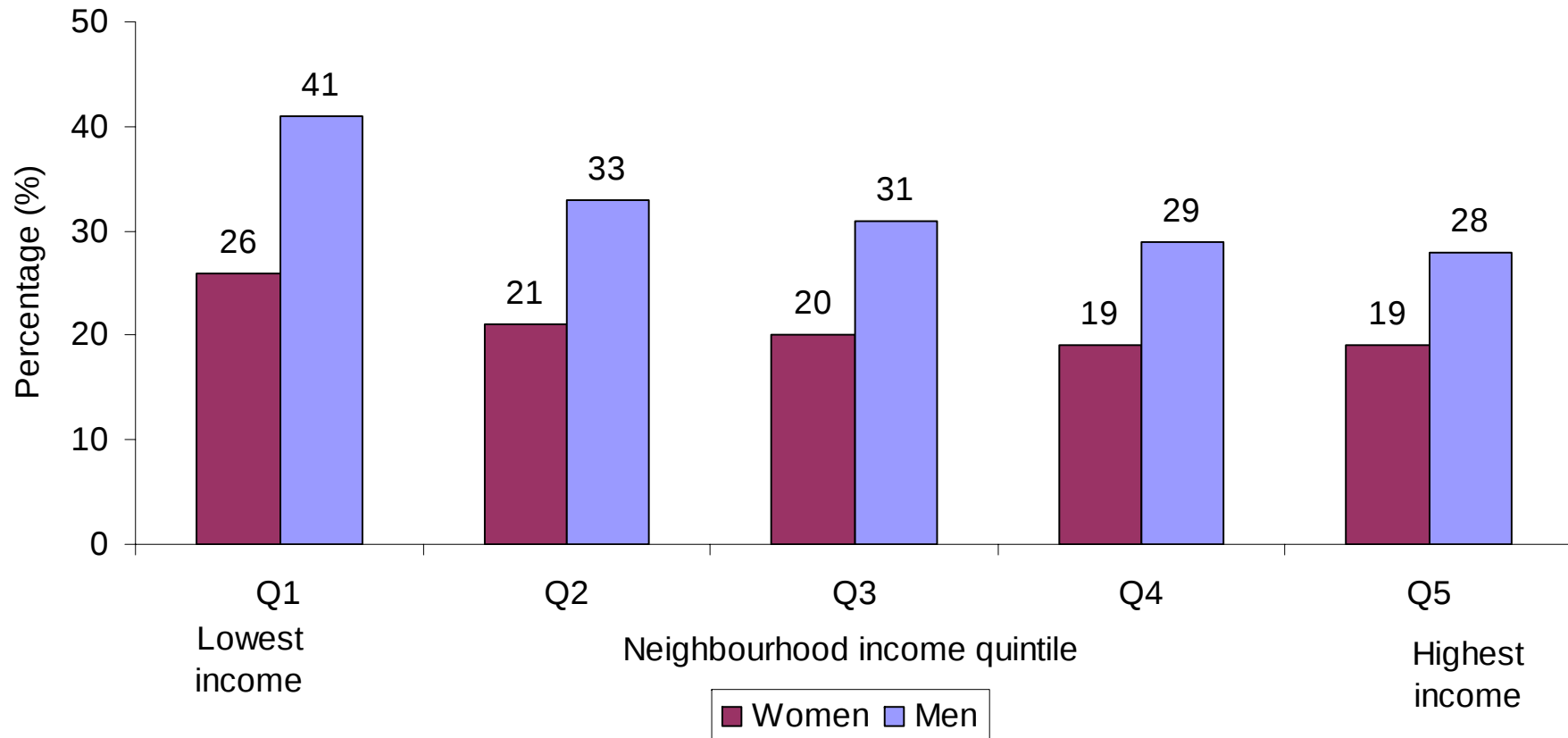


■ Mortality

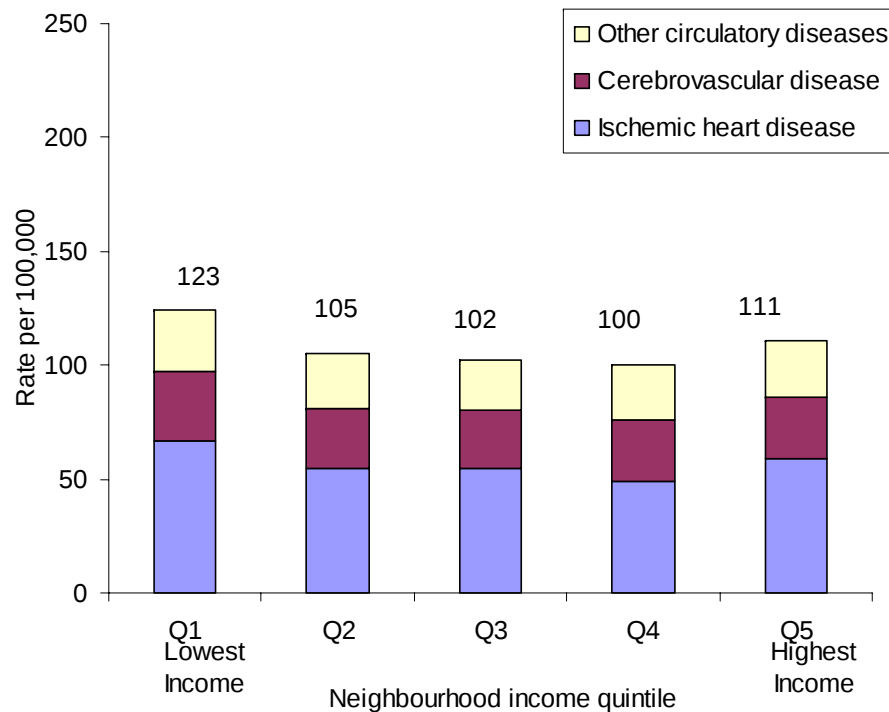
All-cause mortality rate per 100,000 population, by sex and neighbourhood income quintile, in Ontario*, 2001



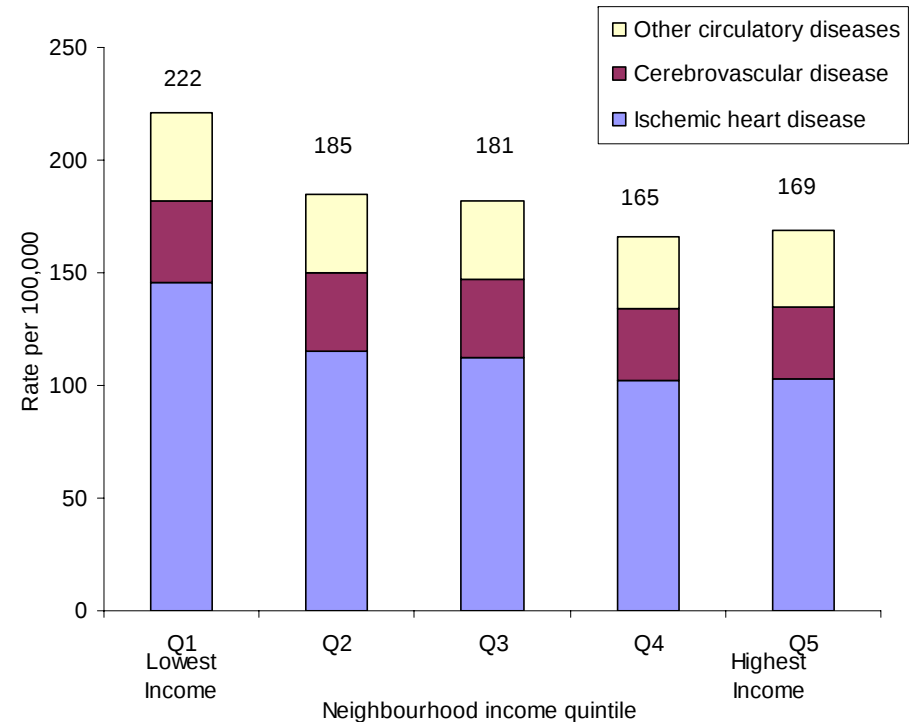
Premature mortality (percentage of the population who died before age 75 years), by sex and neighbourhood income quintile, in Ontario*, 2001



Mortality rate from circulatory diseases per 100,000 population, by sex, type of disease and neighbourhood income quintile, in Ontario*, 2001



Women



Men

Summary

- Sizable and modifiable health inequities on multiple measures across multiple domains.
- Identified inequities among women associated with socioeconomic position are often greater than differences between men and women.
- Opportunity to improve population health while reducing health inequities by focusing on chronic disease prevention and management and targeting at-risk populations.

Data Challenges

- Need core items for monitoring that don't change over time
- Data across continuum of care
- Data completeness and quality
- Oversample minority groups
- Domains not measured: caregiving, violence against women

Driving Improvement and Equity

- Prioritize Chronic Disease Prevention and Management
- Coordinate Population Health, Community, and Clinical Responses
- Address the Broader Determinants of Health
- Routinely Include Gender and Equity Analysis in Health Indicator Monitoring

Towards Equity in Health

- Prevention and Health Promotion
- Health System Redesign
 - Chronic Disease Management
 - Patient Centeredness
- Address Broader Determinants of Health
- Performance Measurement and Improvement
 - Routine Gender and Equity Analysis
 - Improve Data Capacity for Measurement
- Build the Evidence Base
 - What Works

Targets for Intervention

- Interventions:
 - Patient Level
 - Practice Level
 - Health System Level
 - Community Level
- Partnerships with Human Service Providers and Community based Organizations
- Quality Improvement-Target and Monitor Disparities
- Advocacy for Policy and Cross-Sectoral Partnerships to Address Social Determinants of Health

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