RCCN Seminar

Cara Tannenbaum, MD, MSc
Scientific Director, Canadian Institute of Gender & Health
Professor, Faculty of Medicine and Pharmacy, Université de Montréal
October 2019
Objectives

- Review different types of gender stereotypes
- List the ways that gender stereotypes affect screening, diagnosis, and treatment of older adults
- Describe strategies to overcome gender stereotypes during teaching, practice and research
MY ASSUMPTIONS
YOU KNOW HOW TO USE THE TERMS *SEX* AND *GENDER* CORRECTLY
TRUE OR FALSE

The terms **SEX** and **GENDER** mean the same thing and can be used interchangeably in clinical care and health research.
FALSE

SEX refers to **biological differences** between males and females like genes, sex hormones, physiology and anatomy.
GENDER
refers to psycho-social differences between women, men, and gender-diverse people; factors like behaviour, roles, identities, cultural and societal influences and expectations.
BOTTOM LINE:
EVERY CELL IS SEXED.
EVERY PERSON IS GENDERED.
RAISE YOUR RIGHT HAND

I solemnly swear
on the scientific method
that I will never again
refer to the gender of animals,
cells or tissues!
YOU PROBABLY HAVEN’T THOUGHT MUCH ABOUT SEX OR GENDER BIAS IN AGING RESEARCH
WE HAVE STUDIES OF FRUIT FLIES, MICE, HAMSTERS, FROGS, MONKEYS AND MEN WITH THIS CONDITION - BUT MEDICAL RESEARCH USING WOMEN AS SUBJECTS JUST NEVER OCCURRED TO ANYBODY.
UNCONSCIOUS GENDER BIAS IN PEER REVIEW

Evidence of Gender Bias by Linguistic Analysis

Researchers have found evidence of unconscious gender bias in recommendation letters. It is, therefore, important to evaluate each candidate’s entire application, and not rely too heavily on only one element.

Letters written for females
- shorter
- less focused on accomplishments
- used more gendered terms
- included more grindstone adjectives
- included more doubt raisers
- more references to personal life

Letters written for males
- longer
- more focused on accomplishments
- included more standout adjectives
- more references to CV, publications or patents
YOU PROBABLY HAVEN’T CONSIDERED GENDER IN AGING BECAUSE GENDER IS SOCIALIZED FROM AN EARLY AGE
GENDER ROLES FOR WOMEN & WHAT WAS SOCIAILY ACCEPTABLE IN THE 1960’S

“Take a tranq”
Tranquilizers = Valium®, Xanax®, Ativan®
‘Kids are different today’, I hear ev’ry mother say
Mother needs something today to calm her down
And though she’s not really ill
There’s a little yellow pill
She goes running for the shelter of a mother’s little helper
What a drag it is getting old

“Mother’s Little Helper” by The Rolling Stones, 1966
70% OF SEDATIVE USERS ARE WOMEN

Memory impairment

Falls

Fractures

Automobile accidents
IDENTIFY
3 DIFFERENT KINDS OF GENDER STEREOTYPES
3 MAIN TYPES

GENDER ROLES
- Behavioural norms
- Occupational choices
- Caregiving roles

GENDER IDENTITY
- Inner sense of self as masculine, feminine, in between or neither
- Cis, trans, or ‘it depends’

GENDER RELATIONS
- Interpersonal interactions: eg. family, workplace dynamics
SWEET & ASSERTIVE &
EMOTIONAL & BRAVE

GENDER ROLE STEREOTYPE

SHE'LL NEED TO KNOW HER PLACE
AND HE BETTER NOT CRY
When returning to the closet is your only choice...

Many LGBTQI2S seniors fear going into assisted living centers and long term care facilities. They often feel they must hide their identities and partners to stay safe from abuse and discrimination.

Go to egale.ca/seniors for resources and training opportunities.

Egale
Canada Human Rights Trust

Lezlie, 61
dyke

losing your independence shouldn’t mean losing your identity
HUMANOID ROBOT INTERACTIONS

• Men and women react and respond differently to ‘male’ and ‘female’ robots.

• Opposite sex seen as more trustworthy, engaging (especially true for male subjects and female robots).

• Why did the original smartphone programmers create “Siri” and “Alexa”?

Siegel. (2009). IEEE Intelligent Robot and Systems
HOW GENDER STEREOTYPES BIASES RESEARCH AND CLINICAL CARE
We measure what we treasure

- Gender roles affect measurement of function and activities of daily living.
- Gender norms lead to assumptions and expectations about how men and women express anxiety and depression.
- What we consider ‘normal’ versus ‘not normal’ creates stigma around self-report, often resulting in treatment failure.
DO YOU THINK THIS ‘ABILITY TO HANDLE FINANCES’ QUESTION IS GENDER BIASED?

<table>
<thead>
<tr>
<th>ABILITY TO HANDLE FINANCES</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manages financial matters independently, collects and keeps track of income</td>
<td>1</td>
</tr>
<tr>
<td>Manages day-to-day purchases, but needs help with banking, major purchases</td>
<td>0</td>
</tr>
<tr>
<td>Incapable of handling money</td>
<td>0</td>
</tr>
</tbody>
</table>

DO YOU THINK THIS ‘FOOD PREPARATION’ QUESTION IS GENDER BIASED?

<table>
<thead>
<tr>
<th>FOOD PREPARATION</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plans, prepares, and serves adequate meals independently</td>
<td>1</td>
</tr>
<tr>
<td>Prepares adequate meals if supplied with ingredients</td>
<td>0</td>
</tr>
<tr>
<td>Heats and serves prepared meals or prepares meals but does not maintain adequate diet</td>
<td>0</td>
</tr>
<tr>
<td>Needs help with all home maintenance tasks</td>
<td>0</td>
</tr>
</tbody>
</table>

GENDER DIFFERENCES IN WHAT OLDER PEOPLE DO AND DON’T DO

| Table 1. Descriptive Statistics, Respondents Aged ≥ 50 Health and Retirement Study (n = 20,218), 1998 |
|-----------------------------------------------|------------------|
|                                                | Males            | Females          |
| Age (average)                                  | 66.5             | 67.4             |
| Instrumental activities of daily living        |                  |                  |
| Self-reported difficulty using a map           |                  |                  |
| No                                            | 85.7%            | 67.4%            |
| Yes/can’t do                                   | 7.5%             | 13.8%            |
| Don’t do                                       | 6.7%             | 18.7%            |
| Missing                                       | 0.0%             | 0.0%             |
| Self-reported difficulty using a telephone     |                  |                  |
| No                                            | 93.1%            | 94.6%            |
| Yes/can’t do                                   | 6.0%             | 5.1%             |
| Don’t do                                       | 0.9%             | 0.3%             |
| Missing                                       | 0.0%             | 0.0%             |
| Self-reported difficulty managing money        |                  |                  |
| No                                            | 90.4%            | 89.9%            |
| Yes/can’t do                                   | 5.7%             | 7.8%             |
| Don’t do                                       | 3.9%             | 2.3%             |
| Missing                                       | 0.0%             | 0.0%             |

Do you think the **GERIATRIC DEPRESSION SCALE** is gender-biased?

**Table 2. Geriatric Depression Scale (10-Item Shortened Form)**

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Are you basically satisfied with your life?*</td>
<td>Yes/NO</td>
</tr>
<tr>
<td>2. Do you feel that your life is empty?*</td>
<td>YES/No</td>
</tr>
<tr>
<td>3. Are you afraid that something bad is going to happen to you?*</td>
<td>YES/No</td>
</tr>
<tr>
<td>4. Do you feel happy most of the time?*</td>
<td>Yes/NO</td>
</tr>
<tr>
<td>5. Have you dropped many of your activities and interests?</td>
<td>YES/No</td>
</tr>
<tr>
<td>6. Do you often feel helpless?</td>
<td>YES/No</td>
</tr>
<tr>
<td>7. Do you feel that you have more problems with memory than most?</td>
<td>YES/No</td>
</tr>
<tr>
<td>8. Do you feel full of energy?</td>
<td>Yes/NO</td>
</tr>
<tr>
<td>9. Do you feel that your situation is hopeless?</td>
<td>YES/No</td>
</tr>
<tr>
<td>10. Do you think that most people are better off than you are?</td>
<td>YES/No</td>
</tr>
</tbody>
</table>

**NOTE:** One point is scored for each response in capital letters. A score of 3 or greater may indicate depression.
WOMEN ARE DIAGNOSED WITH ANXIETY AND DEPRESSION TWICE AS OFTEN AS MEN.

OLDER MEN ARE 10x MORE LIKELY TO COMMIT SUICIDE THAN OLDER WOMEN

Suicide rates for males and females, by age group
United States (2017)

SOURCE: NCHS Data Brief No. 330, Nov 2018
BECAUSE OF OUR “NORMAL” GENDER ASSUMPTIONS, OLDER LGBT INDIVIDUALS SUFFER HEALTH DISPARITIES

Disability

Physical & mental distress

Discrimination & victimization

Access to support, aging and health services

WHEN WAS THE LAST TIME THIS “CUTE LITTLE OLD LADY” GOT SCREENED FOR INCONTINENCE?
OUR ASSUMPTIONS ABOUT “NORMAL” SHAPE WHO GETS TREATED

1-in-2 versus 1-in-5

Only 30% of women seek care for incontinence

80% believe it is a normal part of aging

70% of men seek care for incontinence

All get treated

PHYSICIAN GENDER BIAS ALSO EXISTS IN CLINICAL CARE

MALE PHYSICIAN + OLDER PATIENT = HIGHER MORTALITY & READMISSIONS

FEMALE PHYSICIAN + OLDER PATIENT = LOWER MORTALITY & READMISSIONS

JAMA Internal Medicine | Original Investigation
Comparison of Hospital Mortality and Readmission Rates for Medicare Patients Treated by Male vs Female Physicians

Yusuke Tsugawa, MD, MPH, PhD; Anupam B. Jena, MD, PhD; Jose F. Figueroa, MD, MPH; E. John Orav, PhD; Daniel M. Blumenthal, MD, MBA; Ashish K. Jha, MD, MPH
STRATEGIES FOR OVERCOMING GENDER STEREOTYPES
MORTALITY RATES DECREASE WHEN MALE PHYSICIANS PRACTICE WITH MORE WOMEN!
MITIGATE BIAS: A SYSTEMATIC APPROACH TO HEART ATTACK REDUCES GENDER BIAS

Huded et al. (2018) JACC

HISTORIC CONTROL GROUP
490 men       233 women

Men vs Women
77% vs 69% guideline therapy
104 vs 112 min door to balloon time
30-day mortality 6.1% higher in women

INTERVENTION GROUP
378 men       171 women

Usual care for
ST-Elevation MI (heart attack)

New 4-step protocol
1. ER Criteria do not require cardiology consult
2. Guideline based drug therapy
3. Immediate transfer to the cath lab
4. Initial radial approach for vascular access

Men vs Women
84% vs 80% guideline therapy
89 vs 91 min door to balloon time
30-day mortality reduced to 3.2% higher in women
Did you know?

Men are younger than women when they sustain a hip fracture. They also suffer more complications and die sooner.

Emergency Medicine Physicians at Rhode Island Hospital Emergency Department are at the forefront of Sex and Gender Specific Emergency Medicine. This is the study of how YOUR biological sex and gender affect your health. We are prepared to translate this state-of-the-art knowledge into life-saving medical care.!
<table>
<thead>
<tr>
<th>Step</th>
<th>Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Identify sex and gender</td>
</tr>
<tr>
<td>2.</td>
<td>Understand sex and gender differences in disease symptoms</td>
</tr>
<tr>
<td>3.</td>
<td>Recognize potential limitations in questions, tests and datasets</td>
</tr>
<tr>
<td>4.</td>
<td>Disaggregate data by sex and gender (even thresholds for biomarkers or lab references)</td>
</tr>
<tr>
<td>5.</td>
<td>When available, dose medications based upon sex-specific evidence</td>
</tr>
<tr>
<td>6.</td>
<td>Mitigate all types of gender bias</td>
</tr>
</tbody>
</table>

6 COGNITIVE STEPS to integrate sex and gender into teaching, research and clinical practice

<table>
<thead>
<tr>
<th>Non-inclusive Questions</th>
<th>Inclusive Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you have <em>children</em> to help you?</td>
<td>Do you have <em>someone</em> to help you?</td>
</tr>
<tr>
<td>Will your <em>husband</em> be here for your ultrasound?</td>
<td>Will a <em>loved one</em> be coming with you?</td>
</tr>
<tr>
<td>Is your <em>wife</em> here with you today?</td>
<td>Is your <em>partner</em> here with you today?</td>
</tr>
<tr>
<td>Do you have <em>family</em> I can call?</td>
<td>Do you have a <em>loved one</em> I can call?</td>
</tr>
</tbody>
</table>
ONLINE TRAINING MODULES

Sex and Gender in Biomedical Research

Sex and Gender in Primary Data Collection with Humans

Sex and Gender in the Analysis of Data from Human Participants

www.discoversexandgender.ca
LEAVE YOUR GENDER BIAS AND STEREOTYPED PERCEPTIONS AT THE DOOR