

# **Diabetes Action Canada**

## **SPOR Network in Diabetes and its Related Complications**

*Virtual Webinar, February 2021*

**Research Spotlight: Sex and Gender**

**Project:** *Exploring the lived experience of diabetes through an intersectional SGBA+ lens*

**Presenters:** Dr. Zoey Jones & Jennifer Akerman



# DAC'S SEX AND GENDER RESEARCH ENABLING GROUP

## **Members:**

- ❖ Dr. Paula Rochon, Lead
- ❖ Dr. Robin Mason, Co-investigator
- ❖ Dr. Paula Harvey, Co-investigator
- ❖ Jennifer Akerman, Research Coordinator
- ❖ Dr. Zoey Jones, Research Assistant
- ❖ Jaimie Roebuck, Communications Specialist
- ❖ DAC Patient Partners

**Goal:** Integration of a sex and gender lens in all DAC-related research projects and related activities.

# GENDER DATA GAP



# SEX AND GENDER EXPLAINED



**Sex:** Biological attributes associated with physical and physiological features.

**Gender:** Socially constructed and accepted roles, behaviours, expression, identities of girls, women, boys, men, and gender diverse persons.

- Gender identity

# SEX, GENDER AND HEALTH

Issue	Sex	Gender
	<b>Risk of Developing Dementia :</b> <ul style="list-style-type: none"><li>• Dementia affects more females than males and increases with age (Government of Canada, 2018).</li></ul>	<b>Isolation :</b> <ul style="list-style-type: none"><li>- 68 % of seniors living alone are women (Tang, Galbraith, Turong, 2016)</li></ul>
	<b>Heart Attack Symptoms:</b> <ul style="list-style-type: none"><li>- Females : pain in the neck/back/jaw</li><li>- Males : pain in chest and discomfort (NIH, 2007).</li></ul>	<b>Diagnoses :</b> <ul style="list-style-type: none"><li>- Women are 7x more susceptible to being incorrectly diagnosed during a heart attack and sent home from the emergency department than men (The Heart Foundation, 2017).</li></ul>
	<b>Medication Management:</b> <ul style="list-style-type: none"><li>- Females metabolise certain drugs differently (slower) than males (eg. Ambien®) (Farkas, Unger, &amp; Temple, 2013)</li></ul>	<b>Seeking Treatment:</b> <ul style="list-style-type: none"><li>- Women are more likely to ask for treatment for misuse of central nervous system depressors than men (Substance Abuse and Mental Health Services Administration, 2016)</li></ul>

# Activity- Is it sex or gender?





slido

Women visit their primary care provider more frequently than men for both physical and mental health concerns (Thompson et al., 2016).

Is this sex or gender?

 Start presenting to display the poll results on this slide.



slido

Men have heart attacks at a younger age than women (Gesensway, 2001).

Is this sex or gender?

 Start presenting to display the poll results on this slide.



slido

Young women with Type 1 Diabetes may restrict their insulin intake to achieve weight control or weight loss (Daneman et al., 2002)

Is this sex or gender?

 Start presenting to display the poll results on this slide.



slido

Women are prescribed lower doses of certain drugs than men (Soldin & Mattinson, 2009).

Is this sex or gender?

 Start presenting to display the poll results on this slide.

# SEX AND GENDER IN DIABETES RESEARCH

<b>Sex Differences</b>	<b>Gender Differences</b>
<p><b>Prevalence :</b> Increases with age Higher in males (8.7 %) than females (7.6 %) (Government of Canada, 2017)</p> <p><b>Risk Factors:</b> T2D is more frequently diagnosed at a younger age and lower BMI among males (Willer et al., 2016) Obesity- the most important risk factor for T2D - is higher among females (Willer et al., 2016).</p>	<p><b>Social context:</b> Adolescent girls report struggling with stigma, “fitting in”, and self-image at school (Dickinson, 2000; Dickinson &amp; O’Reilly, 2004)</p> <p>Men are less likely than women to disclose their diabetes to people at work and in their social lives (Adjei-Poku, 2019; Habenicht et al., 2018; Haltiwanger, 2012)</p> <p>Women’s roles in the family (e.g. wife, grandmother) may interfere with diabetes self-management (Haltiwanger, 2012)</p>

# MOVING BEYOND SEX AND GENDER

Research Subject	Sex	Age	Race
<b>Prevalence of Type 2 Diabetes</b>	<b>Males and Females:</b> Type 2 diabetes is more prevalent in males than females.  (Kautzky-Willer, 2016).	<b>Youth:</b> Approximately two-thirds of children and adolescents diagnosed with type 2 diabetes are female.  (Mayer et al., 2017; Schober et al., 2005; Wei et al., 2003; Urakami et al., 2005; Fu & Prasad 2014 ).	<b>Asian Youth</b> Asian populations reported a higher prevalence of type 2 diabetes in boys compared with girls.  (Fu & Prasad , 2014 ; Xu et al , 2019).

# MOVING BEYOND SEX AND GENDER

Research Subject	Gender differences	Race differences
<b>Type 2 Diabetes Self-care</b>	<p>Women maintain a balanced diet and monitor their blood glucose more frequently than men (Chiu &amp; Wray, 2010; Yu et al., 2013).</p> <p>Men engage in more physical activity than women (Chiu &amp; Wray, 2010; Yu et al. 2013)</p> <p>Women report lower levels of diabetes self-efficacy than men (Chiu &amp; Wray, 2010; Cherrington et al. 2010).</p>	<p>Black women report lower levels of diabetes self-care and self-efficacy than white women and both white and Black men (Naqvi et al., 2020 ).</p>

## Data doesn't tell the whole story

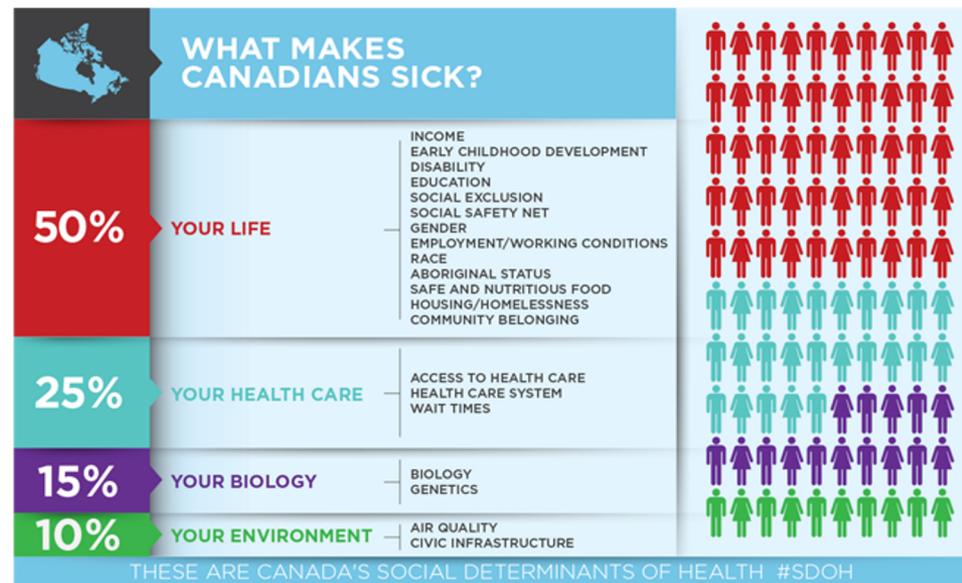
- **WHY** are we seeing these differences between and within groups of women and men and different races/ethnicities?
- **Contextualization** of differences observed in data is critical and complex

# WHAT MAKES CANADIANS SICK?

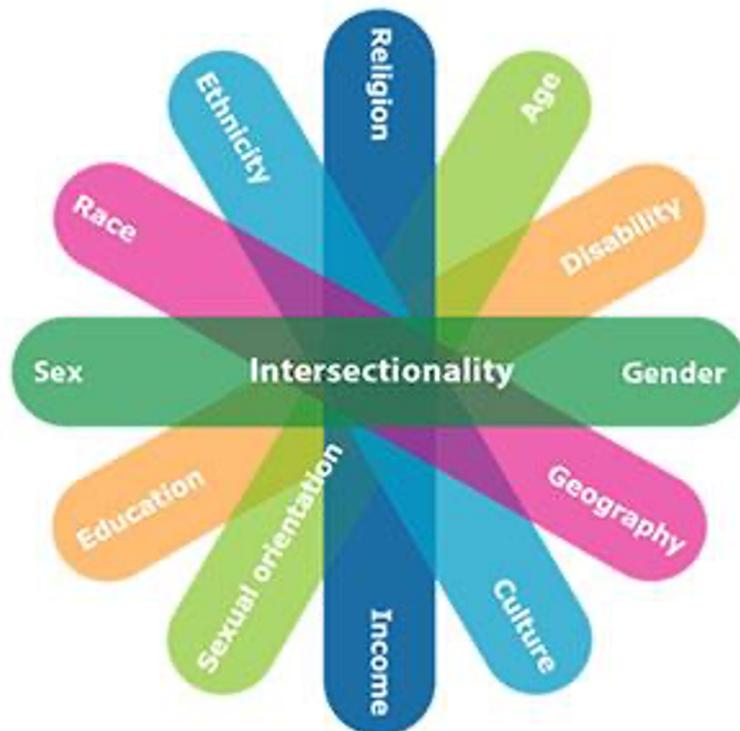
## Social determinants of health:

“A specific group of social and economic factors within the broader determinants of health. These relate to an individual’s place in society, such as income, education or employment. Experiences of discrimination or historical trauma are also important social determinants of health for certain groups, such as Indigenous Peoples.”

- Government of Canada



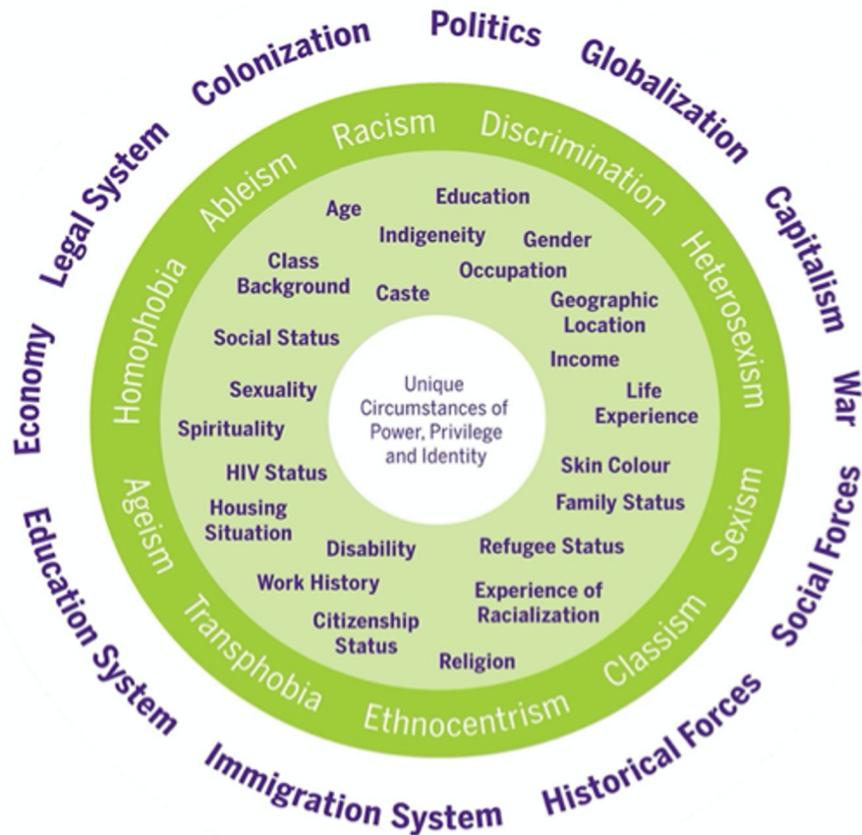
# SEX- AND GENDER- BASED ANALYSIS PLUS (SGBA+)



Status of Women Canada, 2020.

- ❖ **Moving beyond sex and gender**
- ❖ Integrate sex, gender and other key factors of identity throughout the research process.
- ❖ Consideration of structures of power and systems of privilege and oppression.

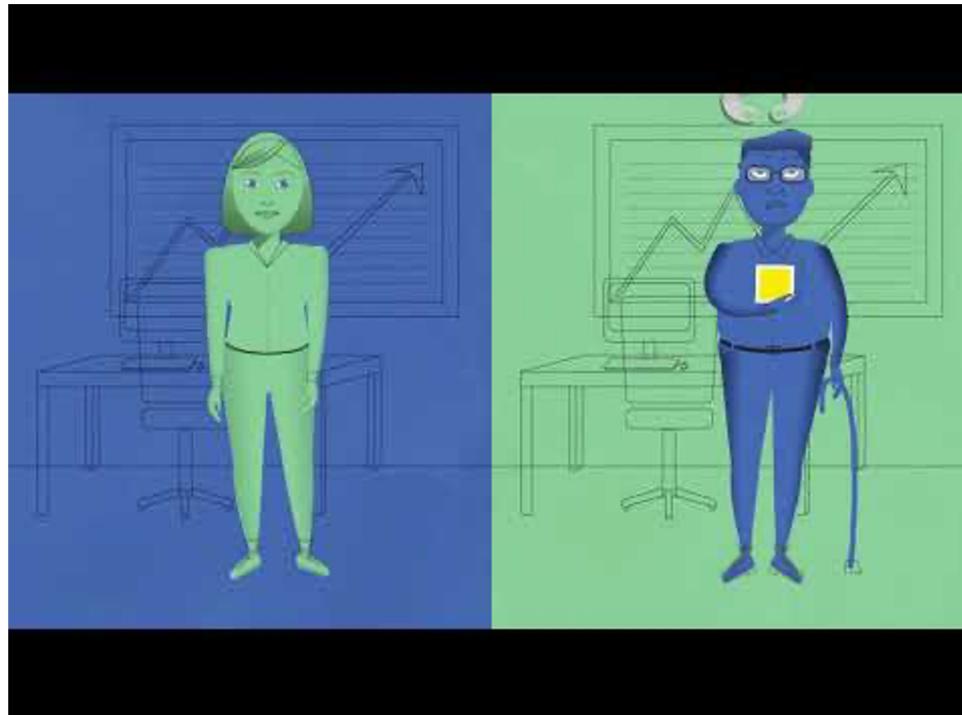
# INTERSECTIONALITY



Canadian Research Institute for the Advancement of Women, Adapted from CRIAWICREF's Intersectionality Wheel Diagram published in Everyone Belongs. A Toolkit for Applying Intersectionality (2009,p.6)

Kimberle Crenshaw--Illustration by Christina Animashaun/Vox; photos by Nolwen Cifuentes for Vox and Getty Images

# Intersectionality: Video



# Applying SGBA+ throughout the research process

## Essential metrics for assessing sex & gender integration in health research proposals involving human participants

Suzanne Day , Robin Mason, Cara Tannenbaum, Paula A. Rochon

Published: August 30, 2017 • <https://doi.org/10.1371/journal.pone.0182812>



# DAC Sex and Gender Research Enabling Group & Patient-Oriented Research

***“Hi! I have been part of sex and gender research from the start. I find it important that research looks at this dimension because you must take into consideration the language, the difference between the sexes and LGBT people and different ethnicities.”***

- André Gaudreau, DAC Patient Partner



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# Do's & Don'ts:

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## Guidelines for Researchers, Patient Partners and anyone new joining Diabetes Action Canada!

By: Dana Greenberg, David Wells, Sasha Delorme and Virtue Bajurny

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### 1 **Treat patient partners as equals.** **Patient partners are experts in their own right.**

- ✓ **DO** recognize that patient partners' lived experience will provide valuable insight that a researcher/medical professional may not have.
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### 2 **Patient partners do not want to be included in a tokenistic manner - they want to be a true part of the project.**

- ✓ **DO** invite patient partners to engage in all parts of the project and be sure to ask for their input. Example: A round table method ensures that everyone has an opportunity to speak.
  - ✗ **DON'T** invite patient partners onto the project because you "have" to and then ignore the potential for their valuable contribution.
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### 3 **Clearly set out expectations from the beginning of the project, so that expectations are managed for both patient partners and researchers.**

- ✓ **DO** ensure that the researcher makes a welcome call to each patient partner to explain the project and increase confidence and understanding.
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# “Exploring the Experience of Living with Diabetes Through an Intersectional SGBA+ Lens”

## **Research Team:**

### **Women’s College Research Institute (WCRI)**

- ❖ Robin Mason, Primary Investigator
- ❖ Jennifer Akerman, Research Coordinator
- ❖ Zoey Jones, project lead

### **DAC Patient Partners**

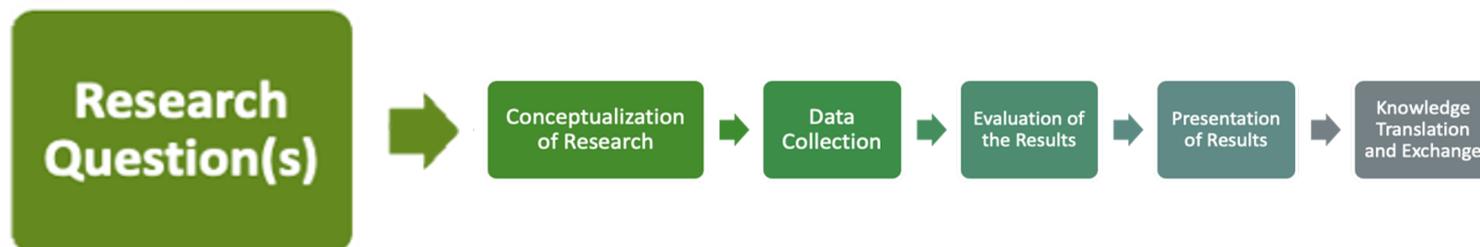
- ❖ Virtue Bajurny
- ❖ Sasha Delorme
- ❖ André Gaudreau

# RESEARCH QUESTION(S)

Project: “Exploring the Experience of Living with Diabetes Through a SGBA+ Lens”

We ask:

- ❖ What does it mean to live with diabetes from the patient’s perspective?
- ❖ How do sex and gender interact with other socio-demographic factors, such as race, ethnicity, Indigeneity, income, ability, and age to shape these experiences?
- ❖ How has COVID-19 affected the experiences of people with diabetes?



# CONCEPTUALIZATION OF RESEARCH

- ❖ Research is patient-informed and patient-centered, should ultimately benefit people with diabetes
- ❖ Consulting with Collective Patient Partner Circle important to developing patient-informed research design
- ❖ Research should include a diverse range of participant demographics to allow for analyzing different parts of SGBA+
- ❖ Qualitative methods are ideal for storytelling and in-depth explanations of experiences
- ❖ Semi-structured interviews leave room if participants feel the conversation should go in a different direction



# DATA COLLECTION: RECRUITMENT

- ❖ Recruiting 15 people for 1-1.5 hour remote interview
  - Type 1 and Type 2 diabetes
  - DAC Patient Partners
  - Diverse group of participants
  - Interviews can be in English and French
- ❖ Compensation: \$35
- ❖ Ongoing recruitment: open now!



# DATA COLLECTION: INTERVIEW QUESTIONS

- ❖ Can you tell me about your experience with diabetes?
- ❖ How do you feel that your age, ethnicity, or gender impact your experience of living with and managing diabetes?
- ❖ Do people treat you differently because you have diabetes? If yes, how?
- ❖ What skills do you think that you have learned or developed to help manage your diabetes?
- ❖ What kind of supports and resources have been most helpful to you in managing your diabetes?



# ANALYSIS AND EVALUATION OF RESULTS

- ❖ Transcripts from people with Type 1 and Type 2 diabetes will be analyzed separately\*
- ❖ Analysis: How do patients' accounts differ by sex, gender, and other demographic characteristics/identities?
- ❖ DAC Patient Partners will participate in thematic analysis after data has been made anonymous



\*Feedback from Collective Patient Partner Circle, Nov 2020

# BENEFIT TO COMMUNITY

How can we best use this research to benefit people with diabetes?

Current plan:

- ❖ Add to existing diabetes literature
- ❖ Model how to use an SGBA+ lens in diabetes research and influence other researchers to adopt more inclusive and patient-oriented research design
- ❖ Use materials in training, so people who provide care to people with diabetes are better informed about the diversity of experience that people may have
- ❖ **Informing tailored strategies to people's needs (with medical care)**





Zoey: [zoey.jones@wchospital.ca](mailto:zoey.jones@wchospital.ca)

Jenn [jennifer.akerman@wchospital.ca](mailto:jennifer.akerman@wchospital.ca)