2020 Heart Month Spotlight on Women: A fighting chance

*Brief for Heart & Stroke external stakeholders*

**Summary**

Women are not small men. There are real biological differences between the sexes, and not just the obvious ones. Women’s hearts are smaller, with smaller coronary arteries, and plaque builds up in their blood vessels differently. Yet, two-thirds of clinical heart disease and stroke research is based on men, and this sex and gender research gap is costing lives.

Heart & Stroke’s 2020 Spotlight on Women: A fighting chance, shows momentum is building and delves into promising research that will help close this gap. Spotlight focuses on the poignant stories of three women who face unique sex and gender challenges on their road to recovery.

The three exciting new areas of work include the discovery of a drug that could replace open-heart valve surgery, critical because women are 25% more likely than men to die after aortic valve surgery; new clues into the causes of SCAD, the most common cause of pregnancy related heart attack which disproportionately strikes young and otherwise healthy women; and new understanding of how depression and other mental issues negatively impact heart disease, including the shocking fact that twice as many women are affected.

We are making big strides, but much remains to be done. Women are still paying to high a price for gaps in research, prevention, diagnosis and treatment. The public can continue to support Heart & Stroke by joining the #RedList – a collective of people who are helping us move our mission forward by donating to fund research, keeping informed and advocating for themselves.

**Content**

*What’s new: Momentum is building and funding for heart disease and stroke research on women is yielding results.*

A drug that could replace open-heart surgery

- Jennifer Michaud was born with aortic stenosis. At 29, surgery saved her life but left her exhausted and in pain for months. If the drug proves successful, women like Jennifer may be able to postpone or even altogether avoid surgery, critical because women are 25% more likely than men to die after aortic valve surgery.

Clues into a killer of young women

- Sudi Barre was recovering from an emergency c-section when she had a heart attack caused by a spontaneous coronary artery dissection (SCAD). SCAD is the most
common cause of pregnancy-associated heart attacks, and 88% of SCAD patients are women typically young and otherwise healthy. Implanting a stent only led to more heart attacks and her heart function plummeted to 3%. Dr. Jacqueline Saw has developed a way to analyze angiograms that will help doctors detect SCAD. Within the next five years, she expects new genetic screening tools to lead to better rates of diagnosis in the ER and better protocols for treating the disease.

Missed or dismissed
- It took nearly a year before Karen Narraway was diagnosed with heart disease requiring quadruple bypass surgery. After surgery, she suffered post-traumatic stress disorder (PTSD). As a former cardiac nurse, Karen was not surprised at the physical recovery, but she didn't expect the mental and emotional struggles she would face. Depression increases the risk of a cardiac event by 50-70% and it strikes twice as many women as men. Dr. Paula Harvey points to a groundswell of new research on the connections between the brain and heart that will lead to better screening, diagnosis and treatments.

Why this is needed: Women are dying unnecessarily because we don’t fully understand the difference between women’s and men’s hearts and brains, and this sex and gender research gap is costing lives.

- (Shockingly) two-thirds of heart disease and stroke clinical research is based on men.
- At every stage — from diagnosis to treatment to recovery — women fare worse than men. Their symptoms often go unrecognized, some treatments are less effective, and women take longer to get better and face higher rates of recurrence.
- We are making big strides, but much remains to be done. Women are still paying too high a price for gaps in research, prevention, diagnosis and treatment and continue to be under-aware, under-diagnosed, under-researched and under-treated.

What is Heart & Stroke doing: Since the launch of the Women’s campaign, thousands of Heart & Stroke donors have stepped up, and contributed millions to women-specific heart disease and stroke research:

- More than 4,000 people have joined the #RedList, a collective of people who are ready to drive change by donating to fund research and by keeping informed on what Heart & Stroke is doing so they can have the tools to empower themselves.
- Through research competitions focused on topics specific to women, 27 scientists will share a total of $4.3 million over five years.
- Heart & Stroke has mandated that all H&S funded research consider sex and gender-based analysis and reporting (SGBAR). In the past 5 years, the number of funded
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- research projects that include sex and gender-based analysis and reporting has increased by 30 percent.
- We have funded a national research network of scientists, people with lived experience of heart disease and stroke to advance knowledge about women’s heart and brain health

Additional Facts:
- Heart disease and stroke are the #1 cause of premature death for women in Canada.
- Women are 10x more likely to die from heart disease, stroke and related vascular conditions than from breast cancer.
- Eighty-eight per cent of SCAD patients are women, many young and otherwise healthy.
- Nearly 40% of female patients experience depression after a cardiac event.
- Heart attacks are more deadly for women, and women are more likely to suffer a second heart attack than men.
- Gender-based differences such as lower socio-economic status, the myth that heart disease is a ‘man’s disease and a tendency to dismiss women’s symptom’s as anxiety also affect women’s health.

Call to Action (CTA). The public can continue to support Heart & Stroke by joining the #RedList, a collective of people who are helping us move our mission forward by donating to fund research, keeping informed and advocating for themselves.