



Women's Health Research Institute
Putting Women First

July 2014

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Dear Friends,

Last month our e-newsletter focused on the importance and need to include both males and females in research studies from basic bench science to clinical trials. Initially, the impetus for including females in research was more of an equity issue (females were left out!) and as a result grew under the rubric of women's health.

We now know that sex differences exist across all body systems and can impact how diseases are manifested, diagnosed and treated. We not only know that men and women react differently to some medications, but we have also learned that increased knowledge about sex differences not only helps women, it impacts men, too. In other words, the field of women's health is actually evolving into sex-specific medicine.

This month's newsletter will focus on sex differences that are significant in men. Inclusion of males and females in research not only addresses inequities in female medicine, it leads to a more individualize approach to diagnosis, treatment and better care for all people.

Sincerely,

The Institute Staff

Sex Differences in Common Diseases

Researchers are discovering significant differences in the way men and women experience disease. Some diseases only appear in one sex (e.g. prostate cancer and ovarian cancer). Other conditions are more prevalent in one sex (e.g. women are more likely to acquire an autoimmune disease while men are more prone to epilepsy). Conditions that appear in both sexes may demonstrate sex difference in incidence, symptoms, age of onset, severity, prognosis, and response to treatment. The way in which men and women metabolize medication can also be different and an important reason to further advocate for sex-based research.

Below are examples diseases that are known to have sex differences that may be surprising to men! It's time we start asking how, and more importantly, why?

Depression



Depression in the United States has been shown to be twice as prevalent in women than in men. It is well known that men are less likely to talk about their feelings with their physician and may result in the under reporting of depression in men. When men do have depression, they generally report a lack of energy or interest in activities they once loved (sports, hobbies, family). They also find themselves more irritable and fatigued.

A recent study published in an article in [JAMA Psychiatry](#) looked at the disparity in depression for men and women in a different light. This study found that men tend to express their depression in ways completely different than typically found in women and therefore have not, until now, fit the diagnosis of depression. Some "male-type" symptoms included anger attacks, aggression, substance abuse and risk taking. Once these were taken into account as symptoms of depression, the disparity narrowed. In this study, they found depression in 30.6% of men and 33.3% of the women. There is also a suicide difference: depressed women attempt suicide more than depressed men. However, more of the men actually complete the suicide and die than women.

Medications for treating depression have common side effects for men and women such as fatigue, drowsiness, insomnia, dry mouth, and blurred vision, but every individual is unique in their reactions.

Heart Disease



In the past, heart disease was often considered a man's disease due mainly to perceived riskier behaviors (smoking, drinking, avoidance of annual check-ups, unhealthy diet). We now know that heart disease is the number one killer in both men and women in the U.S. Cardiology is the one area where there has been a growing increase in knowledge about sex differences starting with a revised look at the symptoms for heart attacks that are listed below.

Symptoms in Men

- Chest pain or chest discomfort
- Palpitations
- Lightheadedness or dizziness
- Fainting/loss of consciousness
- Fatigue
- Shortness of breath

Symptoms in Women

- Neck, jaw, shoulder, upper back or abdominal discomfort
- Shortness of breath
- Right arm pain
- Nausea or vomiting
- Sweating
- Lightheadedness or dizziness
- Unusual fatigue

ALL of the symptoms listed can occur in men and women, however some are more common by sex. Both men and women should constantly be aware of their health and contact your healthcare provider if any of these symptoms occur.

Treatment for heart disease is usually the same in men and women and include lifestyle changes, medicines, medical and surgical procedures that are unique to every person. If you are a smoker, male or female, quitting smoking will be part of your person treatment. If you carry an

unhealthy diet and rarely exercise, both men and women will be given a plan to a healthier way of living. The goals of Heart Disease treatment for both men and women will be to:

- Relieve symptoms.
- Reduce risk factors in an effort to slow, stop, or reverse the buildup of plaque.
- Lower the risk of blood clots forming. (Blood clots can cause a heart attack.)
- Widen or bypass plaque-clogged coronary (heart) arteries.
- Prevent CHD complications.

[For other treatments of Heart Disease, click here.](#)

Osteoporosis



Osteoporosis is an illness that is well known to affect women, but now reaches as many as 2 million American men. Given that four times more women are affected, the risks come into question. Why is there lower risk for men? The usual suspects: Men do not live as long as women and osteoporosis increases with age; men are generally more physically active over the course of their lives creating more bone mass; men do not have the huge drop in

estrogen that women have at menopause.

Other causes for male Osteoporosis can be contributed to factors not associated with women such as having a testosterone deficiency. For low-testosterone men, doctors may advise testosterone replacement to build bone mass. This process involves converting testosterone to estrogen to build bone mass. The dilemma is that science hasn't yet shown how much of the bone-building benefit is a direct testosterone effect -- or the result of turning testosterone into estrogen. Men who genetically lack an enzyme to makes even small amounts of estrogen will most likely get osteoporosis.

A second cause of male osteoporosis is lack of calcium and Vitamin D which is necessary for bone remodeling. Many women take calcium and Vitamin D as part of their health routine after menopause but it is not as common a supplement used by men.

Breast Cancer



Most men never even consider the possibility of being diagnosed with breast cancer. However, according to the [National Cancer Institute](#), about 2,000 cases of male breast cancer (1% of all cases) are diagnosed in the United States, resulting in fewer than 500 deaths each year.

Although a lump should be more readily noticeable in men due to their smaller breasts, men tend to ignore a lump until they feel soreness or have suffered an injury to that area. This assumption is delaying the opportunity for early, more curable, diagnosis and care. Cancer can strike at any age, however, studies have found that male breast cancer occurs five or ten years later than in women. Family history does play a role in both male and female breast cancer and men should let their health provider know if there is family history of the disease so they can consider genetic counseling. It is highly advised to inform your healthcare provider if you have a history of male breast cancer

According to the [Food and Drug Administration](#), men and women share some similar risk factors for breast cancer such as high levels of estrogen exposure, a family history of the disease and a history of radiation to the chest. Although all men have estrogen in their bodies, obesity, cirrhosis (liver disease) and Klinefelter's syndrome (a genetic disorder) increase estrogen levels, and all are known risk factors for male breast cancer. Because the number of cases of male breast cancer is relatively low, there is a lack of men in breast cancer studies so the effectiveness of some therapies have not been studied in men.

For more [General Information About Male Breast Cancer](#), click here.

Resources:

[National Institute for Mental Health](#)

[Psychology Today](#)

[WebMD](#)

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RESEARCH STUDY

Breast Cancer and Depression Study

The Department of Psychiatry and Behavioral Sciences at Northwestern University, in collaboration with Northwestern Memorial Hospital Cancer Center, is conducting a clinical trial for an alternative treatment for depression (not using medication) for women who have Breast Cancer but are currently in remission. This study is for women between the ages of 22-70 and are currently diagnosed with Depression. For participation and more information, please call (312) 503-7071.

INSTITUTE HAPPENINGS

[WHRI Will Host Monthly Research Forum 'Pregnancy Through Childhood: Do Fathers Matter?' Featuring Dr. Sheehan Fisher on July 15, 2014](#)

Join us for our monthly luncheon research discussion featuring Sheehan Fisher, PhD, Instructor, Psychiatry and Behavioral Sciences, Feinberg School of Medicine, Northwestern University for his presentation on "Pregnancy Through Childhood: Do Fathers Matter?"

This event will take place on Tuesday, July 15 from 12:00-1:00pm in Prentice Women's Hospital, 250 E. Superior Street, 3rd floor conference room L. To ensure your seat and a lunch. Registration is FREE.

[REGISTER TODAY!](#)

UPCOMING EVENTS

WHRI Monthly Research Forum "Pregnancy Through Childhood: Do Fathers Matter?" Featuring Dr. Sheehan Fisher, July 15 from 12:00-1:00pm

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