# Recognizing Heart Disease as a "Woman's Disease" 

## Maureen Kroning RN*

Department of Nursing, Nyack College, United States

## Introduction

Recently while working at the hospital, a 56 year old women came into the Emergency Department (ED) complaining of abdominal discomfort which had been occurring on and off over the last few days. She appeared well nourished with an estimated $20 \%$ over an ideal body weight for her age and height. She complained of mild abdominal discomfort with some upper chest discomfort with a reported pain of 7 on a pain scale of $0-10$. She also reported having a history of reflux for the last few months which worsened after consuming heavy fatty meals. She reported taking Zantac 150 mg PO PRN which provided some relief of symptoms about a half hour after taking the medication. Yet, the last few days she reported that Zantac did not provide the usual relief. On further report taken by the Nurse Practitioner (NP) the patient reported having some recent shortness of breath, nausea and vomiting which had occurred two times the previous night. The NP assessed the patient's vital signs and noted the patient's Blood Pressure (B/P) was $152 / 94$ and her Pulse rate was 132 . The NP ordered an Electrocardiogram (ECG), Complete Blood Count (CBC), Cholesterol panel and Triponin levels. The woman's laboratory findings confirmed a diagnosis of acute Myocardial Infarction (MI) or more frequently known as a "heart attack". When the patient was told she had suffered a heart attack she had a look of shock and disbelief. The patient's husband commented "Isn't my wife too young for that?"; "I thought this was something men usually get". While working in an acute care hospital setting for over twenty years, this response was not uncommon. Heart disease has been long thought to be a disease that more often affects men but this not the case. Heart disease is the number one killer among women yet, according to the Center for Disease Control (CDC), only $54 \%$ of women recognize this fact. Symptoms of heart disease among men and women are so different that women think this disease is a "man's disease" and the most common way women with heart disease present in the ED is "dead on arrival" (Dr. Magliato, President AHA of Greater Los Angeles). Women need to understand that heart disease is a disease that affects women as well as men yet, their symptoms might be quite different than men.

## Heart Disease

Heart disease refers to several types of heart conditions that affect the heart. The most common type of heart disease in the United States (US) is Coronary Heart Disease (CAD) which can cause complications such as: Myocardial Infarction (MI), Angina, Heart Failure and Arrhythmias. An estimated $64 \%$ of women who die suddenly from Coronary Heart disease had not reported previous symptoms" (CDC). Perhaps, if women learn the symptoms to report it would increase their heart disease survival rates.

Heart disease affects the body's blood vessels causing arteries to narrow and even cut off the blood supply by forming blood clots in the heart vessels which can lead to a heart attack. Heart disease can also cause blood to clot along other blood vessel walls such as in the lung which can cause a Pulmonary Emboli (PE) and the blood vessels in the brain which can cause a Cerebral Vascular Accident (CVA). According to the CDC, heart disease causes approximately 600,000 people to die each year from this disease, making it the leading cause of mortality among both men and women in the US. Approximately 720,000 individuals suffer a heart attack each year causing an enormous toll not
only on the individuals, their families, and communities but also on the entire healthcare system. It is estimated that coronary heart disease alone costs the US 108.9 billion dollars yearly for healthcare services, medications and the loss of productivity (CDC). Understanding and addressing the risk factors of heart disease is essential to help combat this deadly disease (Figure 1).

The majority of risk factors for heart disease can be grouped into three categories: hereditary factors, medical conditions and behavioral tendencies. Hereditary risk factors can be genetic or run in families. Hereditary risk factors may be mistaken for a family's tendency to share unhealthy lifestyle choices such as smoking, drinking alcohol, an unhealthy diet and inactivity. Medical conditions include; predisposing heart conditions. Elevated Low Density Lipids (LDL), decreased High Density Lipids (HDL), increased fibrinogen levels, high blood pressure and Diabetes Mellitus. Behavioral risk factors include; tobacco use, diet high in saturated fats and cholesterol, physical inactivity, obesity, stress and alcohol consumption. Women also have risk factors that are unique


Figure 1: The following picture shows heart disease symptoms most frequently reported in women, according to National Institute of Health (NIH).

[^0]to them such as changes that occur as a result of menopause such as decreased estrogen and increased fibrinogen levels. The common fact among men and women is that when heart disease is left untreated, it can cause detrimental consequences.

## Heart Disease in Women

Heart disease in women is more common than most think. According to National Vital Statistics reports (2009) heart disease is the leading cause of death among women in the US. Yet, women and their families often seem surprised when told in the Emergency Department (ED) that they have suffered a heart attack. Perhaps this can be contributed to the fact that, "heart disease is sometimes thought as a "man's disease"" and "despite increased awareness over the past decade, only $54 \%$ of women recognize that heart disease is their number one killer (CDC).

Women who present in the ED with cardiac symptoms often report several reasons for waiting longer to seek medical attention when heart disease occurs The reasons women often report are; understanding little about how heart disease affects women, down playing their symptoms, lack of access to research studies and, heart disease education and prevention appeared to be more often geared towards men than women. Being unaware of the signs of heart disease puts women at a disadvantage when faced with this life threatening disease. Healthcare providers need to help women think of this disease not only as a man's disease but as a disease that they can be proactive about and recognize this disease all too often is a disease that affects women as well as men.

Women need to be proactive and begin screening for heart disease in order to prevent the life threatening consequences that can occur as a result of undiagnosed, untreated heart disease. According to the American Heart Association (AHA) 80 percent of heart attacks among women can be prevented thus, it's essential for women to learn what puts them at risk for developing heart disease and then assessing their own risk factors so it prevented. Women today often take on more and more responsibilities with working full-time, caring for children and keeping up with both work and family demands. The stress to meet demands of both a job and family can contribute to women's risk of heart disease and may even be too busy and overwhelmed by responsibilities that they fail to take time to recognize the signs of heart disease when they occur. According to the AHA chronic stress can damage the artery walls and decrease the immune system which leads to a higher risk of heart disease. . Healthcare providers can be instrumental in educating and supporting women about ways to recognize treat and prevent heart disease.

## Assessment and Education is Key

Nurses play a vital role in obtaining a patient's history, collecting pertinent assessment data as well as assessing educational needs. Assessment and education are essential in preventing and treating heart disease among women. Education needs to focus on teaching women about healthy lifestyle choices, recognizing the risks and symptoms of heart disease, seeking regular healthcare screening and hopefully preventing, diagnosing and treating heart disease. Nurses are on the forefront of healthcare providers which are able to provide the needed education on heart disease for women of all ages. According to the National Vital Statistics, heart disease is responsible for an estimated 1 in 4 deaths among women yet; it is a disease that can be both prevented and treated (AHA). Educating and supporting women on the risk factors associated with heart disease is vital. Women must look at their own risk factors and begin to make lifestyle changes to prevent this
deadly disease. For instance, women between 45 and 55 years of age are likely to experience menopause which causes a decrease in estrogen level and an increase in fibrinogen levels. This along with age related changes in the blood vessels puts a woman at increased risk for heart disease. It is important to teach women symptoms of heart disease (CDC) to report to healthcare providers such as: fatigue, shortness of breath, indigestion, upper abdominal pain or nausea, jaw pain, throat pain and arm pain especially of the left side which include symptoms that are more often reported by women. According to National Institute of Health (NIH) the following picture shows heart disease symptoms most frequently reported in women.

## Assessment is Essential

Assessment is essential in providing women with effective education related to heart disease. Family life styles are often passed down from one generation to the other therefore, it is vital to assess one's lifestyle to treat and prevent heart disease. According to the Center for Disease Control (CDC) even while heart disease may run in families, families also may share similar risk factors such as unhealthy lifestyles which also contributes to the increases risk of heart disease. It is necessary to obtain subjective data, data which can be only verified by that individual, data such as: smoking history, alcohol consumption, dietary intake, activity level or level of inactivity as well as job and family responsibilities that may contribute to added stressors. Asking the questions has be conducted in a manner that is nonjudgmental and each women feels safe to answer honestly for that is essential in developing an individualized educational program that can make positive lifestyle changes. Women may not want to discuss feeling stressed over a full-time job and having to care for her kids and husband as well as possible other family responsibilities and may even feel guilty and misunderstood experiencing pressure and stress. Healthcare providers need to be sensitive to the responsibilities and needs of women. It is necessary to assess a person's medical history, family history and lifestyle.

Assessing by creating a safe, open nonjudgmental environment needs to be created and then specific questions need to be explored in detail not simply to fill in a history form. . Nurses need to take their time when taking a history and use the time taking a history as an opportunity to provide needed education. For instance asking such questions as: how much do you smoke? how long have you smoked, what type of cigarettes or other substances do you smoke?; how much alcohol do you consume?; how often do you drink alcohol?; Describe what a typical day dietary intake looks like?; what is your daily activity level like? All of these questions are vital in assessing each woman's risk factors and based on the answers is opportunity to educate. Each question needs to be followed with more detailed questions in order to gain insight to just how much risk of heart disease each woman has. Assessing not only subjective data but objective data, data that can be measured and tested against an acceptable standard is also necessary to collect in order to assess heart disease risk.

## Assessing Objective Data

Assessing objective data such as: assessing weight, Blood Pressure readings ( $\mathrm{B} / \mathrm{P}$ ) and lab values such as LDL, HDL and blood sugar levels are necessary to assess one's heart disease risk. According to the AHA, LDL also known as the bad cholesterol causes plaque to build up and deposit in the arteries leaving them inflexible which can cause a heart attack. Low level of HDL is also a known risk factor associated with heart disease. Elevated blood sugar levels associated with insulin resistance known as Diabetes is also a known risk factor for heart

| Blood Pressure <br> Category | Systolic <br> mm Hg (upper \#) |  | Diastolic <br> mm Hg (lower \#) |
| :--- | :---: | :---: | :---: |
| Normal | $\mathbf{1 2 0 - 1 3 9}$ 120 | And | Or |
| Prehypertension than $\mathbf{8 0}$ |  |  |  |
| High Blood Pressure <br> (Hypertension) Stage 1 | $\mathbf{1 4 0 - 1 5 9}$ | Or | $\mathbf{8 0 - 8 9}$ |
| High Blood Pressure <br> (Hypertension) Stage 2 | $\mathbf{1 6 0}$ or higher | Or | $\mathbf{1 0 0}$ or higher |
| Hypertensive Crisis <br> (Emergency care needed) | Higher than 180 | Or | Higher than 110 |

Table 1: This chart reflects blood pressure categories defined by the American Heart Association
disease. According to the AHA individuals with insulin resistance are at higher risk at having too much LDL and too little HDL cholesterol levels as well as having higher than normal triglyceride levels which place individuals at a greater risk for heart disease and suffering a heart attack (Table 1).

According to the CDC the more overweight a person is the higher their risk for developing heart disease becomes. Blood pressure screening is an essential component in assessing heart disease risk. According to AHA high blood pressure puts an individual at increased risk for heart disease. There is the need to educate women about what is a normal blood pressure reading based on one's age. For instance according to the American Heart Association a B/P reading of 110/70 is considered within normal limits while a $B / P$ reading of $140 / 90$ is considered to be high blood pressure which is commonly called Hypertension (HTN). Recognizing $\mathrm{B} / \mathrm{P}$ readings in between what is considered normal and HTN is important for this may be pre-HTN or a warning sign for HTN. Thorough assessments are essential to provide the necessary screening, diagnosing and treatment of women with heart disease.

## Conclusion

It is essential healthcare providers conduct thorough heart disease assessments in order to screen, treat, prevent and educate women about heart disease. Healthcare providers need to advocate for research and education so that there will be a greater awareness about heart disease
in women. According to The Society for Women's Health Research and Women Heart, gender specific research and research that includes minority women is lacking. Research is essential to address the effects of heart disease in women and can provide insight into effective prevention strategies and early detection methods to diagnosis and treat heart disease in women. Research is needed to assess stress levels of women today and how the stress contributes to increase a women's risk of heart disease.

There are noted differences among heart disease signs between men and women. Coronary Heart Disease can go unnoticed in women until they actually suffer a heart attack (NIH). Thus it is essential women are aware of the signs and symptoms, risk factors and healthy life style choices to prevent the devastating effects of heart disease. .Seeking early treatment when symptoms present is vital in improving the outcome of heart disease. It is important to teach women how to incorporate prevention strategies such as: consuming a healthy diet, maintaining optimum weight, maintaining an active lifestyle, maintaining both normal blood sugar and blood pressure levels as well as avoiding risk factors such as smoking, drinking alcohol limit their stress and any unhealthy behaviors that can lead to heart disease. Advocating for women and promoting education regarding health issues affecting women needs to be a priority so more women can be saved.

## References

1. ABC News (Dr. Magliato) 5 Symptoms of Heart Disease
2. American Heart Association (AHA)
3. American Heart Association (AHA). Stress and Heart Disease.
4. Center for Disease Control (CDC)
5. Kochanek KD, Xu JQ, Murphy SL, Miniño AM, Kung HC (2011) National vital statistics reports. 60.
6. National Institute of Health (NIH). What are the Signs and Symptoms of Heart Disease?
7. Society for Women Health Research (2014)
8. WebMD (2011). Essential Screening Tests Every Women Needs.

[^0]:    *Corresponding author: Maureen Kroning RN EdD, Associate Professor of Nursing, Nyack College, 1 south blvd, 10960, Nyack, NY 10960, United States, Tel: 8455703593; Fax: 8455703593; E-mail: maureen.kroning@nyack.edu
    Received November 26, 2014; Accepted December 29, 2014; Published January 04, 2015

    Citation: RN MK (2014) Recognizing Heart Disease as a "Woman's Disease". J Women's Health Care 4: 219. doi:10.4172/2167-0420.1000219

    Copyright: © 2014 RN MK, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

