National Resource Center on Native American Aging
Center *for* Rural Health

NATIVE AGING FACTS

Congestive Heart Failure among Older American Indians and Alaska Natives

Winter 2010

Overview

Congestive Heart failure (CHF) is a condition in which the heart is unable to pump a sufficient quantity of blood to meet the body's needs.[1] CHF affects an estimated five million Americans and about 550,000 are diagnosed with CHF annually[1] and is the principal cause of death for approximately 400,000 persons annually in the U.S.[2] The prevalence of CHF is expected to rise in future years due to several factors including higher rates of cardiovascular disease and increased life expectancy resulting from advances in medical treatment and technology. Major clinical risk factors for CHF include advancing age, male gender, hypertension, myocardial infarction, diabetes mellitus, valvular disease and obesity.[3,4,5,6,7]

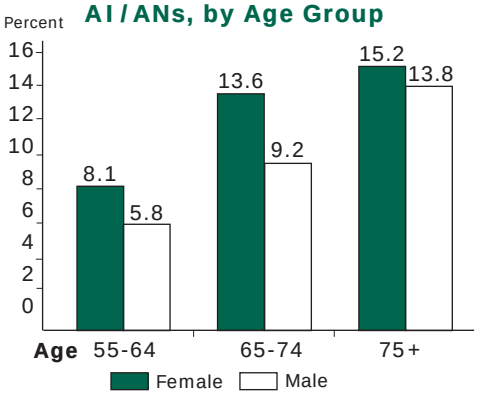
Although some studies suggest American Indians and Alaska Natives (AI/ANs), compared to Caucasians, are at increased risk for developing heart disease, few studies have examined CHF and related health risk factors among older AI/AN populations. The purposes of this study were to:

- Determine the prevalence of CHF among AI/AN elders;
- Assess gender and age patterns of CHF prevalence;
- Determine other disorders that are commonly found among AI/AN elders with CHF; and
- Examine the relationship between CHF, physical activity and body mass index (BMI). BMI is a reliable and commonly used indicator of total body fat.[8]

Findings: One of Ten American Indian and Alaska Native Elders has Congestive Heart Failure

Ten percent of older AIs/ANs have CHF. Men (11.8%) are slightly more likely than women (9%) and increasing age corresponds with higher CHF prevalence for both genders (Figure 1). The largest increase in CHF prevalence among men occurs at age 65-74; conversely, women's large prevalence increase occurs at ages 75 and older.

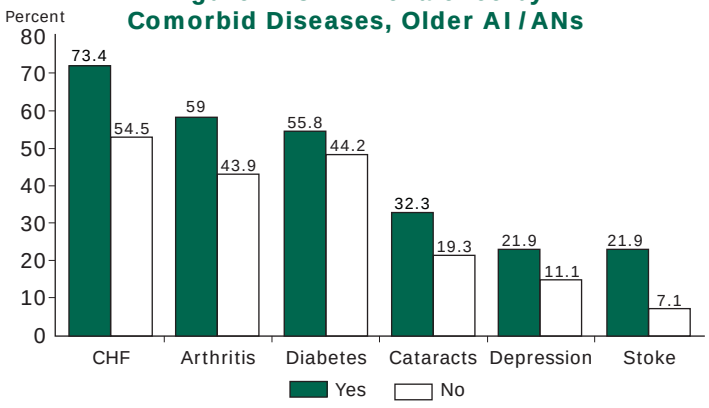
Figure 1. CHF Prevalence among Older AI/ANs, by Age Group



American Indian and Alaska Native Elders with CHF are more likely to have other health conditions

Other health conditions were examined to determine which were significantly associated with having CHF. Figure 2

Figure 2. CHF Prevalence by Comorbid Diseases, Older AI/ANs

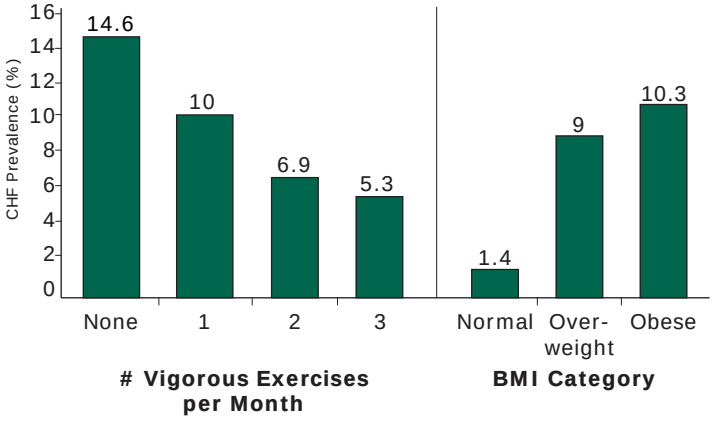


provides the prevalence of CHF by the presence or absence of these other conditions. Hypertension has the strongest link to CHF with 73% of persons with hypertension also having CHF versus 55% of persons without hypertension having CHF. Other conditions that were linked to hypertension included arthritis, diabetes, cataracts, depression and stroke (Figure 2).

American Indian and Alaska Native Elders with CHF are Less Active and Heavier

Figure 3 illustrates the prevalence of CHF based on frequency of physical exertion and BMI category. People who exercise less and are overweight or obese are more likely to have CHF.

Figure 3. CHF Prevalence by Monthly Exercise Prevalence and Body Mass Index



Discussion

CHF is a serious chronic health condition that afflicts many older AI/AN populations. About 12% and 9% of AI/AN men and women reported having the condition; as a rough comparison, 7.2% and 5.2% of U.S. men and women aged 60-79 years had CHF.[9] Elders with certain chronic conditions such as hypertension and diabetes, and those who are physically inactive and overweight/obese are at increased risk for CHF. Taking steps to prevent coronary artery disease can help prevent CHF. These steps include following a heart healthy diet, refraining from smoking, engaging in physical activity on a regular basis and losing weight if you're overweight or obese. Working with your health care provider to control diabetes and hypertension also can help prevent CHF. Native elders with CHF can live longer and enjoy greater quality of life if their condition is diagnosed early and they follow their prescribed treatment regimens which can include taking medicines and modifying lifestyle. There is no cure for CHF but researchers are developing and testing new treatments, offering improved means of controlling CHF and its complications.

Method

Voluntary survey, administered via face-to-face interviews of 15,802 AI/ANs aged 55 or older in 2006-2007. This survey effort was administered by the University of North Dakota Center for Rural Health National Resource Center for Native American Aging.

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