

Services Provided:

- Individual therapy
- Group therapy
- Pre-surgical evaluations
- Psychological evaluations



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Current and previous issues of the CHP monthly newsletters are now on our website under "News & Info."

Coronary Heart Disease

Coronary heart disease (CHD) is usually caused by a condition called atherosclerosis, characterized by the accumulation of fatty substances in the arteries. This develops unnoticed over many years (Krantz & Lundgren 1998). Some of the end-stage consequences of clinically important atherosclerosis can be angina pectoris, myocardial ischemia, myocardial infarction, and sudden cardiac death.

Behavioral factors and lifestyle variables play an important role in predisposing individuals to developing heart disease. The risk of developing CHD increases

synergistically with the presence of multiple risk factors (Higgins & Luepker, 1988), which may be classified as either modifiable or nonmodifiable. Risk factors that cannot be modified include chronological age and gender; risk of CHD increases with age, but at younger ages (especially before the age of female menopause) men are more susceptible to CHD than are women. A family history of CHD is another risk factor that cannot be modified (Glueck et al., 1975; Nicolosi & Schaefer, 1992). Potentially modifiable risk factors include EH, cigarette smoking, high blood

levels of low-density lipoprotein cholesterol and low levels of high-density lipoprotein, diabetes, obesity, a sedentary lifestyle, and psychosocial risk factors (Ockene & Ockene, 1992). Often patients have several of the aforementioned risk factors, which increases the risk of developing CHD.

This is the ninth of our monthly CHP newsletters. Please feel free to email us with topic requests, questions, etc. for future issues.

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Psychosocial Risk Factors

Psychosocial factors include individual predispositions, such as responsivity to stress, and characteristics of the social and physical environment. Evidence has suggested that chronic and acute stress play an important role in the development and prognosis of CHD. Chronic stress may result from the presence of life stressors for months or years (Rozanski, Blumenthal, & Kaplan, 1999). Acute stressors describe provocations in the environment that require the individual to expend considerable effort to cope. Additionally, recent research (Muller,

1999; Willich, 1999) suggests that intense negative emotions such as anger may trigger myocardial infarction and sudden death among individuals with existing disease. Acute stress may also serve as a trigger for sudden cardiac death. This includes stress from personal traumas (Cottington et al., 1980) as well as the occurrence of natural disasters such as earthquakes (Leor, Poole, & Kloner, 1996) and wars (Meisel et al., 1991). Even regular daily life stress, both physical and mental, may trigger tran-

sient episodes of myocardial ischemia among cardiac patients (Gabbay et al., 1996; Gullette et al., 1997).

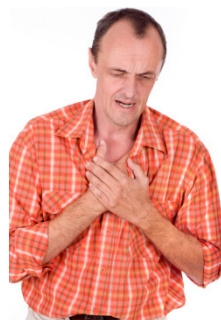
Lack of social and economic resources, insufficient social support, and social isolation can increase the risk of developing CHD (Shumaker & Cjakowski, 1994). Social support can serve as a moderator or buffer between stress and the development of disease (Krantz & Lundgren, 1998). It may also serve a more practical function such as providing access to available resources or increasing medical compliance (Krantz & Lundgren, 1998).



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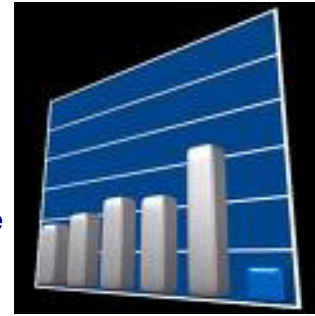
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Coronary Heart Disease Statistics

- Heart disease risk is greatest among African American men residing in high-stress, poor neighborhoods (Polednak, 1998)
- Estimates for the year 2005 are that 80,700,000 people in the United States have one or more forms of cardiovascular disease. 16,000,000 of these people have coronary heart disease (www.americanheart.org)
- Coronary heart disease caused 451,326 deaths in 2004 and is the single leading cause of death in America today (www.americanheart.org)
- 16 million people alive today have a history of heart attack, angina pectoris or both. This is about 8.7 million males and 7.3 million females (www.americanheart.org)
- This year an estimated 1.2 million Americans will have a new or recurrent coronary attack (www.americanheart.org)
- About 310,000 people per year die of coronary attack in an Emergency Room or without being hospitalized. Most of these are sudden deaths caused by cardiac arrest, usually resulting from ventricular fibrillation (www.americanheart.org)
- From 1994 to 2004 the death rate from coronary heart disease declined 33 percent (www.americanheart.org)
- In 2004, coronary heart disease death rates per 100,000 people were 194.2 for white males and 223.9 for black males; and 114.7 for white females and 148.7 for black females (www.americanheart.org)
- Worldwide, coronary heart disease kills more than 7 million people each year (WHO, 2004)



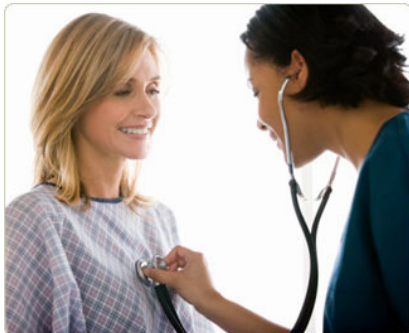
Psychosocial Treatment Approaches

There are psychosocial treatments that have been found to be effective in fighting CHD. Typical psychosocial interventions include interventions aimed at modifying specific psychosocial components such as the Type A behavior pattern, hostility, stress, social support, and lifestyles.

One meta-analysis (Linden, Stossel, & Maurice, 1996) observed that psychosocial approaches to treating CHD lead to an amelioration of psychological distress (mainly depression and anxiety) and physiological endpoints such as blood pressure, heart rate, and serum cholesterol levels.

Cardiac rehabilitation programs

aimed at modifying the Type A behavior pattern are based on the premise that Type A and hostility behaviors are significant risk factors for disease (Blumenthal & Emery, 1988). Evidence has demonstrated that modification of hostility and Type A behavior pattern leads to a significantly lower rate of recurrence of myocardial infarction among patients receiving the usual cardiac care (Friedman et al., 1986).



Other types of stress management and social support interventions have also been proved successful in reducing CHD-related morbidity and

mortality (Blumenthal et al., 1997).

The Lifestyle Heart Trial (Ornish et al., 1990) was an intensive program to modify risk factors in a group of patients with CHD. Components of this trial included a low-fat vegetarian diet, stress management (using yoga) and group support, smoking cessation, and a program of moderate exercise training. Results demonstrated a reduction in the extent of stenosis or blockage in program participants compared to a usual care control group.

Diverse treatment options are available for treatment of CHD. Promising psychosocial interventions include focusing on exercise, lifestyle changes, modification of individual characteristics such as the Type A behavior pattern and hostility, depression, and social support.