



Coronary Heart Disease in Zambian Women

A Practical Fact Sheet

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Coronary heart disease (CHD) is a condition in which the blood vessels supplying the heart become narrowed or blocked due to the buildup of fatty deposits, known as plaque. This process, called atherosclerosis, reduces blood flow to the heart muscle and can lead to serious complications such as chest pain (angina), heart attacks, heart failure, or even sudden death. Globally, CHD is one of the leading causes of death among both men and women, and its impact is increasingly being felt in Zambia as urbanization and lifestyle changes continue.

In Zambia, many women are not aware that heart disease is a major health risk, as it is often perceived to be a condition affecting mainly men. This misconception contributes to delayed diagnosis and treatment. Additionally, symptoms in women can be less typical and are sometimes overlooked by both patients and healthcare providers. The growing burden of hypertension, diabetes, obesity, and sedentary lifestyles—especially in urban populations—has further increased the risk of CHD among Zambian women.

Several risk factors contribute to the development of coronary heart disease. Lifestyle factors play a major role, particularly diets high in fried foods, fatty meats, and processed items, which are increasingly common in urban settings. Physical inactivity also contributes significantly, as does smoking, including exposure to secondhand smoke. Medical conditions such as high blood pressure, diabetes mellitus, high cholesterol levels, and obesity are particularly important, with hypertension being especially prevalent in Zambia. These conditions often coexist and significantly increase cardiovascular risk.

Women also face unique risk factors related to hormonal changes. Before menopause, estrogen provides a protective effect against heart disease; however, this protection declines after menopause, leading to a sharp increase in risk. Smoking can further accelerate menopause, removing this protection earlier. Family history also plays an important role, especially if close female relatives have had heart disease.

The symptoms of coronary heart disease in women can vary. While the classic presentation includes a heavy or crushing chest pain that may radiate to the left arm, neck, or jaw, many women experience less typical symptoms. These include shortness of breath, unusual fatigue, dizziness, nausea, or discomfort that resembles indigestion. Importantly, some women may have no warning symptoms before a heart attack, making awareness and early screening critical.

A condition known as microvascular angina is more common in women and can present with typical chest pain despite normal large coronary arteries. This condition is caused by dysfunction of the smaller blood vessels in the heart and, although it carries a lower risk of heart attack, it can significantly affect quality of life and requires proper evaluation and management.

Diagnosis of coronary heart disease in Zambia depends on available resources. Initial evaluation often includes an electrocardiogram (ECG) and echocardiography. In more advanced settings, stress testing, CT angiography, or coronary angiography may be performed to confirm the diagnosis and assess severity. However, access to these advanced investigations may be limited to specialized centers.

Treatment of CHD includes both medication and, in some cases, procedures. Medications such as aspirin or clopidogrel help prevent blood clots, while beta-blockers and other drugs reduce the workload on the heart. Statins are commonly used to lower cholesterol levels. In more severe cases, procedures such as angioplasty with stent placement or coronary artery bypass surgery may be required, though availability can be limited in many parts of the country.

Prevention remains the most effective strategy for reducing the burden of coronary heart disease. Controlling blood pressure through regular monitoring and treatment is essential. Physical activity should be a core part of daily life, with women aiming for at least 150 minutes of moderate-intensity exercise per week, including a combination of aerobic activity such as brisk walking and strength training to support metabolic health, muscle mass, and overall cardiovascular protection. Maintaining a healthy weight, particularly avoiding central obesity, is important, as is stopping smoking entirely.

Dietary habits play a critical role in cardiovascular health. Women are encouraged to adopt healthier cooking methods such as boiling, steaming, or grilling instead of deep frying. Increasing intake of protein and fibre—through foods such as beans, lentils, fish, eggs, and vegetables—can improve satiety, metabolic health, and cholesterol levels. Reducing processed foods and excess sugars is equally important. Adequate hydration should be maintained throughout the day, and attention should also be given to sleep hygiene, as poor sleep is increasingly recognized as a contributor to cardiovascular risk. Stress reduction strategies, including mindfulness, relaxation techniques, and social support, are also key pillars of long-term heart health.

Screening for diabetes and high cholesterol is recommended, especially for women over the age of 40 or those with additional risk factors. Early detection and treatment of these conditions significantly reduce the likelihood of developing coronary heart disease.

Menopause represents a critical period for cardiovascular risk in women. As estrogen levels decline, the risk of coronary heart disease increases significantly. Hormone replacement therapy (HRT) is now increasingly recognized as part of the standard of care for many women in perimenopause and menopause, not only for symptom control but also for its potential cardiometabolic benefits when appropriately prescribed. Women are encouraged to consult a trained menopause practitioner and to educate themselves on the benefits and risks of HRT, allowing for informed, individualized decision-making.

Women should seek urgent medical attention if they experience persistent chest pain lasting more than ten minutes, severe shortness of breath, fainting, or sudden collapse. Early treatment can be lifesaving and significantly improve outcomes.

In summary, coronary heart disease is a major and growing health concern in Zambia. Increased awareness, early detection, and proactive management of risk factors—including lifestyle optimization and appropriate hormonal care—can greatly reduce the impact of this disease. Empowering women with knowledge about their heart health is a critical step toward improving long-term outcomes.