

Women and heart disease

In the past it was thought that coronary heart disease (CHD) was much less common in women than in men. This indeed did apply to women under 65 years. While many men developed CHD in their fifties and sixties, the disease usually occurred in women over 65 years.

Cholesterol

Under the age of 65, men are more likely to have a high total and LDL cholesterol level in their blood (the LDL is the bad cholesterol). Women have a higher HDL cholesterol than men (HDL is the good cholesterol). These differences are probably due to different hormonal levels which affect the levels of cholesterol types in the blood. Thus, in women, there is partial protection from cholesterol deposits in the arteries until after the menopause. After the menopause, women usually have higher LDL cholesterol than men. This disadvantage in older women continues until life is complete. Women live longer than men and hence have "old age" in which to present with CHD.

Blood pressure

In industrialised societies, there is a pattern of rising blood pressure (hypertension) related to ageing. The large pipes (arteries) become more rigid. The small pipes (arterioles) become less flexible and slow the flow of blood from the arteries, while pushing the arterial blood pressure higher. Older age affects the level of blood pressure.

Smoking

In the past, as many as 70% to 80% of men and as few as 5% to 10% of women were smokers. This has changed. Only about 20% of men and 20% of women now smoke. Smoking contributes enormously to death rates.

Exercise

Significant physical effort of work has become less with industrialisation. It has been replaced by mechanical handling. Some studies of energy use

have shown that housework is more energetic than production line work. Leisure time physical activity has become an enjoyable diversion for both men and women who retain or take up pleasurable forms of exercise. Such activities increase life expectancy and delay the onset of CHD.

Overweight

Obesity, overweight and diabetes run hand in hand with CHD in older people, both men and women. This progressive cluster of risks appears to be increasing with the free availability of high caloric food and fatty food.

Causes of death

What we appear to have is a pattern of increased life expectancy (at least until now), with ageing being coupled with later onset of CHD – particularly in older women. Do we really know all of the above? Does it mean that there is a progressive increase in death rates from CHD in women or is the increase in part due to errors in recording cause of death? Cause of death is based on certification of the cause recorded by the doctor who signs the death certificate.

The commonest pattern of living for aged women in our society is that the older female member lives with younger family members or in a nursing home. The aged, respected and loved family member passes quietly, often at night, and is noted to be in a peaceful state. She has died quietly and had been unaware of any new symptoms. Why and how did she die? She died because she was old and her time had come. How did she die is more difficult to answer, except to say that her heart stopped beating. Why did it stop beating? The partial answer is that it stopped because it was old and weak and something acted as a silent stressor. In the International Classification of Diseases there used to be a diagnosis of "senility without dementia". That meant she could be certified as dying from "old age". I have never seen a death certificate using this category as the cause of death. It is easier to certify that the cause of death was a "coronary heart attack (myocardial infarction)".

In the past autopsies were commonly performed if the diagnosis was not clear. Autopsy findings showed that heart attacks were less common than silent urinary tract infections, silent pneumonia, or

deep vein thrombosis (DVT) with a blood clot passing to the lungs or nothing found to have specifically led to death. One recent American study found that although aged women who died in a nursing home were certified as having a myocardial infarction or heart failure, autopsy showed that most had no myocardial infarct or heart failure; they had the conditions listed above. Even without the bolstering effect of certification of cause of death, CHD is as common in women as it is in men but generally presents as illness 10 years later.

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