

Heart disease runs in families

It has long been known that coronary heart disease and the many risk factors associated with it cluster in families. Family members of patients with coronary heart disease, including children, siblings and even spouses, are at increased risk of cardiac illness.

The risk of cardiovascular disease (CVD - heart disease and stroke) is most marked in the families of patients with premature CVD. The level of risk is greater for the family of patients where the patient has had a heart attack or stroke at a younger age (before the age of 60).

Much of the increased likelihood of cardiac illness within a family is associated with high levels of risk factors. The risk is due to shared genes and common patterns of behaviour. Genes or inherited familial traits are probably accentuated by common behaviours within families. For example, patients who smoke are likely to have a spouse who smokes. Similarly, a physically inactive person commonly lives with a spouse who is also inactive. However, our research shows that the genetic contribution to risk is probably greater than the behavioural contribution because siblings generally have worse risk factor profiles than spouses of similar age.

Because of their high risk, family members of cardiac patients should find out if they have any risk factors, apart from a positive family history. These may include high blood pressure, high cholesterol level, diabetes or high glucose level in the blood, obesity or overweight, not to mention smoking and physical inactivity. The first step is to seek medical advice from your family doctor.

Drug treatment to control high cholesterol levels or high blood pressure is likely to be recommended. Advice should also be given to

help those who smoke, who are overweight or who are physically inactive to adopt healthier habits.

Screening of the community for CVD risk factors has proved to be of limited value. However, targeted screening can be most useful for people who are known to be at higher risk than the general community, such as family members of cardiac patients.

Screening, coupled with advice and motivation to change health behaviours, can significantly reduce the incidence of heart disease or stroke in high risk individuals. This increased risk is being addressed in Europe, where it has been recommended that all first-degree relatives of patients with premature CVD disease be screened for modifiable coronary risk factors.

In many places, cardiac rehabilitation programs encourage the attendance of spouses and other family members. Their involvement not only supports the patients, but also encourages relatives to improve their lifestyles in order to reduce their own risk of CVD.

The message from this is simple. If you are a first degree relative of a person who has known heart disease, you should be medically reviewed to assess your own risk. If risk factors are found, they should be treated by your doctor and you, to reduce that risk. Good health behaviour and good luck go together!

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