Social Inequality, Lifestyle and Heart Disease

A study published in *BMC Medicine* suggests that women with lower levels of education and living in deprived areas are at higher risk of coronary heart disease (CHD) due to smoking, obesity and physical inactivity.

A large body of research has established a strong association between health-related behaviours, such as smoking, and risk for CDH and has also linked health-related behaviours to socioeconomic status and level of education. In a large prospective study of women in the UK, Fould and colleagues investigated the association between education and area deprivation and CHD risk. They also assessed the contribution of smoking, alcohol consumption, physical activity and body mass index (BMI) to these inequalities.

A total of 1,202,983 women aged 56 years on average without a medical history of heart disease, stroke and cancer were recruited in the study and were followed for first coronary event and for CHD mortality. The researchers estimated relative risks of CHD and the extent to which any association could be accounted for by smoking, alcohol, physical inactivity and BMI.

The results demonstrated that women who had completed compulsory schooling with no qualifications were twice as likely to develop heart disease and die from it than women with a degree. Furthermore, women living in the most deprived areas also had twice the risk of heart disease compared to those living in the least deprived areas. When the four aforementioned lifestyle factors were taken into account, these, particularly smoking and to a lesser extent alcohol consumption, physical inactivity and BMI, accounted for most of the inequalities observed for CHD risk both by education and by area deprivation. In conclusion, “much of the inequality in CHD risk associated with education and area deprivation was accounted for by smoking, alcohol consumption, physical inactivity and BMI.”

The current study focuses on the importance of recognising that the risk for developing CHD is strongly affected by behaviours that are linked to education and area deprivation. It also underlines the importance of the development of new public health policies to reduce smoking and to promote healthy lifestyle behaviours as well as their potential gains.