Low self-related health (SRH) is one, single-item, measure of low chronic general health. SRH has been shown to be a predictor of total cardiovascular mortality in prospective studies of generally healthy populations. Several factors influence SRH scores, including medically diagnosed conditions, adverse lifestyle and other risk factors for total and cardiovascular mortality (including age), and individual resilience and resources to cope with declining health. Adjustment for major established risk factors does not, however, account for the association between SRH and total and cardiovascular mortality in population studies.

Furthermore, SRH scores were also predictive of recurrent coronary heart disease (CHD) events and death in patients with CHD at baseline. Components of the haemostatic system play several roles in atherosclerosis, arterial thrombosis and cardiovascular disease. Several blood hypercoagulability measures, including plasma levels of fibrinogen, von Willebrand factor (VWF) antigen, fibrin D-dimer and tissue plasminogen activator antigen, are now established as risk factors for CHD, stroke and cardiovascular mortality in prospective studies. While plasma levels of these haemostatic factors are associated with several established cardiovascular risk factors (age, smoking, body mass index, blood pressure, cholesterol, triglycerides, and inflammatory markers), they are independently associated with cardiovascular risk after adjustment for these risk factors.

The association between SRH and components of the haemostatic system has not been previously studied. In this issue, Von Kanel and colleagues report the association of SRH with plasma fibrinogen, VWF and D-dimer levels in plasma levels of haemostatic factors (which were positively associated with GRACE risk scores), as well as the effects of antithrombotic treatments (although exploratory analyses adjusting for antithrombotic drug use did not significantly attenuate the associations of SRH with haemostatic factors).

Second, blood samples were also taken during the acute event, therefore measuring acute phase increments from basal levels in plasma levels of haemostatic factors (which were positively associated with GRACE risk scores), as well as the effects of antithrombotic treatments (although exploratory analyses adjusting for antithrombotic drug use did not significantly attenuate the associations of SRH with haemostatic factors).

Third, this cross-sectional study did not investigate the associations between SRH, plasma levels of haemostatic factors and long-term outcomes after acute coronary syndromes. The study of Von Kanel and colleagues is of interest because it raises the hypothesis that activated haemostasis may be one potential causal mechanism for the established associations between low SRH and adverse cardiovascular outcomes. Further studies of this hypothesis should be prospective, and conducted in representative samples of both general populations and specific patient groups.
Inflammation and antiinflammatory drugs play important roles in cardiovascular disease and its prevention and treatment, there is increasing interest in inflammation and anti-inflammatory drugs in cardiovascular disease prevention.14–17

Fig. 1 Low self-rated health, cardiovascular disease and mortality—interactive pathways.

References