Study design, study populations and timeline

The data builds on two cohorts, from the prospective LSH- study (Life circumstances, Stress and Health), both funded by the Heart and Lung Foundation, and using the same design.
For both cohorts, participants (50% women) were randomly selected from community based middle-aged Swedish populations and stratified by gender and age.

Cohort I: 1007 participants, aged 45-69 at inclusion with data collected 2003-2004.
Cohort II: 6500 participants, aged 40-70 at inclusion, data collected 2012-2015.

Data collection:

In cohort I, we collaborated with 10 Primary Health Care centers (PHCs) in Östergötland county council and sampling was done from the normal population of the catchment area for each PHC. In cohort II we collaborated with 27 PHCs in Östergötland and 19 PHCs in Jönköping county council. Sampling was done from individuals listed at the respective PHC. Exclusion criteria were serious disease e.g. terminal cancer or dementia.

At each PHC, purpose-trained nurses collected data according to a strict manual. Laboratory samples were collected, transported and stored according to a well-defined protocol. Participants were invited by letter. After a signed informed consent they responded to questionnaires, collected saliva samples at home and visited their PHC for examinations and blood-sampling.

Measures

Questionnaire data:

Validated instruments are used, where the majority are identical or comparable for cohort I and II and have been used earlier in our studies.

Socio-Economic Status:

Education, occupation, employment status and economic strain (income data are collected via registers, see below).
Social and work environment;
Demand/control/social support at work; effort/reward imbalance at work, overcommitment, emotional support and social integration.

Psychological resources:

Mastery, self-esteem, sense of coherence, trust, perceived control Additional for cohort II: compassion and resilience.

Psychological risk factors:

Hostile affect and cynicism, perceived stress, vital exhaustion, hopelessness, depressiveness and depressive symptoms

Health behaviours:

Tobacco consumption, physical activity, alcohol consumption and intake of fruits and vegetables.

Demographic variables:

Age, sex, civil status, and country of origin.

Health status:

Heredity for CHD, CVD and diabetes, doctors report of present/previous disease, medication, self-rated health (SF-36) and Ladder of Life.

Visit to the PHC clinic

The physical examination at the PHC clinic comprised of a health examination following a standardized protocol including: weight, height and waist-hip measures (standardized dress, e.g. no shoes); blood samples for fasting serum glucose and blood lipids, morning urine (see below); resting blood pressure and heart rate (five minutes rest in a sitting position using Omron automatic device where the mean of the last two of three measures was used). All participants received professional feedback on established risk factors. Patients were referred to a physician if they were diagnosed with hypertension, hyperlipidemia or pre-diabetes.

Saliva samples:

Saliva samples were collected at home using Salivettes during two consecutive days at awakening, 30 minutes after awakening and in the evening before going to bed, using a standardized protocol, e.g. fasting and no smoking (xx). Differences between morning and evening values (diurnal deviation) will be used as the principal measure of cortisol dynamics.

Fasting blood samples:

Fasting blood samples were collected according to standard clinical and laboratory routines. Plasma, serum and buffy coat preparations were separated into 0.5 ml and 2.0 ml aliquots and samples stored frozen (-70°C) until analysis.