Coronary artery disease is associated with persistent lower quality of life in women

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Gijberts et al reported the unfavourable impact of coronary artery disease (CAD) on the health-reported quality of life (HRQoL) in women using data from the Utrecht Coronary Biobank cohort. (Add Ref openhrt-2014-0000231.R2) The mean self-rated health status based on the EuroQol-5D (EQ-5D) was significantly lower in women compared with men (6.46±1.40 vs 6.84±1.49, p<0.001). In all the domains of the RAND-36, women reported poorer outcomes than men, especially for physical and social functions. In addition, compared to the general Dutch population, women with CAD had significantly poorer HRQoL compared with men. This study adds relevant clinical implications of the secondary prevention of CAD in patients within a large sample (1020 men and 401 women with CAD) and gives an accurate description of the impaired domains of the HRQoL in patients with CAD. The persisting poorer outcomes of HRQoL in women suggest that gender-related factor remains a major issue regardless of the disease severity and treatment.

Recently, data from among patients who had premature acute coronary syndromes (ACS) taken from the GENESIS-PRAXY study (GENdEr and Sex determinants of cardiovascular disease: from bench to beyond-Premature Acute Coronary SYndrome) suggest that women had poorer HRQoL (measured by the Short Form 12 (SF-12) and Seattle Angina Questionnaire (SAQ)) than men 1 year after ACS.1 Gender-related factors, such as femininity score, social support and housework responsibility, are important predictors of HRQoL, and appear to be more important than sex and medical conditions. These recent data underlie the tremendous effect of premature ACS on productivity and opportunity costs in younger patients, especially in women.4 Indeed, public health interventions, such as systematic cardiac rehabilitation, should be implemented to improve perceived health status in the CAD population, especially in women.

As HRQoL includes multidimensional dimensions, such as patients’ illness perception, instead of intrinsic disease outcomes (eg, cardiovascular morbidity or mortality), it is important to focus attention on these outcomes in patients with CAD.2 3 Several instruments are valid to measure HRQoL and these can be classified into two groups: generic and disease-specific instruments (box 1). Self-reported health status by visual analogue scale (VAS) has been used in large cardiovascular studies, such as the Bypass Angioplasty Revascularisation Investigation 2 Diabetes (BARI 2D).1 Self-rated health status measurement has been associated with clinical objective outcomes, but the variance of estimates was influenced by subjective perception.5 This might be particularly important in younger patients with disease who tend to evaluate their health more negatively.5 In addition, subjective evaluation of the health status in patients with CAD could be additionally influenced by socioeconomic and psychological factors, based on elicited preferences using the EQ-5D instrument.6

Health economic studies need input parameters to capture health benefits and utility measured by means of quality-adjusted life years (QALY) as standardised metrics. The health utility is expressed on a scale between 0 (death) and 1 (perfect health), and is derived from generic instruments such as VAS or EQ-5D.7 Recent cost-effectiveness analyses and health economic evaluation did not routinely derive health utility estimates according to gender.8 9 However, data from observational studies, as the one published by Gijberts et al, suggest that aggregated utility estimates are not accurate, which emphasises the need for more specific scenario analyses.

In conclusion, integrating HRQoL in medical decisions or treatment outcomes is increasingly recommended by the European...
and American guidelines for ACS management. HRQoL is as an essential outcome in patients with CAD for cardiologists and policymakers for future healthcare interventions: the evaluation of novel technologies by health authorities needs contemporary reference values to assess appropriately the resource use and the health utility gain from these given the background of increased budget constraints.

**Competing interests** None declared.

**Provenance and peer review** Commissioned; internally peer reviewed.

**REFERENCES**


