were found comparing male and females or between adolescents with mild, moderate or severe CHD, However, 17y and 18y had a higher IP score (p=0.006), than younger participants (14y=25.00; 15y=25.61; 16y=31–02; 17y=26.87; and 18y=43.83). In univariate linear regression analyses demographic characteristics, empowerment, transition readiness, patient reported health and QOL were significant at $p<0.1$. Multivariate analyses showed that a higher level of IP score was only significantly associated with a lower QOL, experiencing more symptoms and higher treatment anxiety (Table 1).

Multivariable linear regression

Correlates with $p\leq0.05$	B (SE)	β
Quality of life	-0.16 (0.05)	-0.25
Heart problems	-0.14 (0.06)	-0.20
Treatment anxiety	-0.15 (0.04)	-0.30

Conclusion: A more threatening view of their CHD was associated with experiencing symptoms, treatment anxiety and lower QOL. By intervening on treatment anxiety and increase awareness about symptoms this might lead to a less threating view of their disease, which may have implications on QoL. However, further longitudinal research is needed.

Funding Acknowledgements: Swedish Heart-Lung Foundation;Swedish Research Council for Health Working Life and Welfare;Swedish Children Heart Association;Swedish Research Council

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Perception of symptoms, concerns and global disease experience in patients with heart failure

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Background: Knowledge of subjective perception of symptoms, concerns and global insight of the disease by patients with heart failure (HF) is key for nurse assessment and management. Although not being widely used in this setting, patient-reported outcome measures like the Integrated Palliative Outcome Scale (IPOS) can help nurses to identify and manage the more troublesome symptoms and palliative concerns in HF patients.
Purpose: To evaluate symptoms, concerns and disease perception in patients followed in a multidisciplinary HF Unit using a personal translated version of the IPOS.
Methods: The IPOS is a widely used tool to measure palliative care needs of patients and their families, capturing their most important concerns in relation to symptoms, information needs, patients and family anxieties and overall feeling. We applied IPOS to a set of patients followed in a HF Unit, independently of age, etiology, NYHA functional class and left ventricular ejection fraction (LVEF).
Results: The scale was applied to 595 patients (mean age: 69±11.8 years; 72.1% men; median time from symptoms onset: 77.5months (IQR 22–112); mean LVEF: 44±13.1%, NYHA class I: 9.2%, II: 79.3%, 3: 11.1% and IV: 0.3%). Two hundred and seventy three patients (45.9%) reported concerns 3 days prior to evaluation. The sources of concern most frequently reported were health status (18%), familiar problems (14%), pain (5.9%) and economic problems (5.2%). When perception of symptoms was assessed, weakness was the most frequently reported troublesome symptom (55.1%) being reported as overwhelming or severe in 9.4% of patients. It was followed by mouth dryness (46.2%), lack of mobility (44.5%), pain (43%) and dyspnoea (33.8%). The majority of patients reported depression or anxious (62% and 66.4%, respectively) and 88 patients (14.8%) highlight that rarely or never feel at peace. Most patients considered themselves as a source of anxiety to relatives/carers (85.7%), although generally recognize they share their feelings with family members (72.3%). Four hundred and ninety patients (82.4%) reported having received all the information they needed about their disease.
Conclusions: Patients with HF frequently present concerns related to their disease and these are important sources of depression and anxiety. Importantly, disease related concerns may have a negative role in familiar dynamics, entailing an increased burden of anxiety for patients and family members. Weakness was the most frequently reported troublesome symptom.

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Younger patients'experience of living with mechanical circulatory support

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Purpose: To describe younger patients' experiences of living with a mechanical circulatory support with focus on self-efficacy.
Background: Heart failure is increasing even among younger patients. Life-threatening heart failure can occur and the patient will need heart transplantation. Treatment with mechanical circulatory support (MCS) may be necessary. Living with MCS in the form of a biventricular assist device (BiVAD) means living with a visible mechanical device attached to the body. There are no qualitative studies published describing only younger patients' experiences of living with BiVAD, and how it affects their perception of their bodies. Self-efficacy plays a decisive role in dealing with threatening situations. It is important to gain in-depth knowledge of what BiVAD treatment means and how self-efficacy affects the patient's ability to handle this life change.
Methods: A qualitative interview study with eight adults participants was conducted. The data was analyzed using the phenomenological-hermeneutic method.
Results: An overall theme, Navigating from helplessness to feeling strong in the new reality, and three themes emerged: Feeling homeless in a changed reality describes the experience of suddenly falling ill and the loneliness caused by the disease. Finding my own inner resources shows that the interviewees found the strength to fight for their lives and began to regain control of their situation. Adapting to my new reality describes the importance of drawing strength from others and being able to see MCS as a friend providing respite from the disease.
Conclusions: This study shows the importance of self-efficacy belief in the process that younger patients undergo to be able to accept the treatment and their changed reality, while they are living with mechanical circulatory support. Self-efficacy can increase if patients independently manage and have control over certain aspects of daily life activities. With increased self-efficacy, the changed reality that occurs with MCS treatment is perceived to be manageable and controllable. And therefore, by strengthening patient self-efficacy, wellbeing may enhance.

Funding Acknowledgements: This work was supported with grants by The Local Research and Development Board for Gothenburg and Sodra Bohuslan

HDL CHOLESTEROL – A MOVING TARGET

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Elevated HDL-C is associated with adverse cardiovascular outcomes

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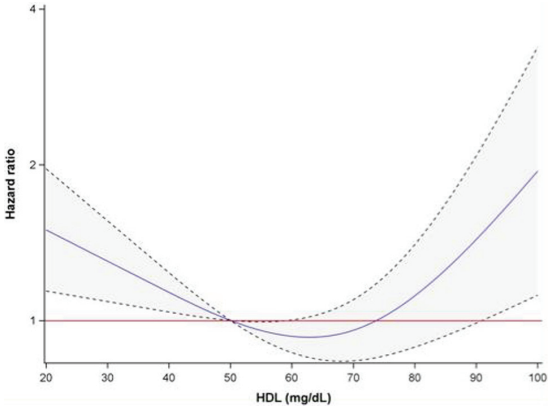
Background: Previous studies have shown reduced cardiovascular (CV) risk with increasing high-density lipoprotein cholesterol (HDL-C) levels. However, at elevated HDL-C levels (>60mg/dl), its atheroprotective functions, such as cholesterol efflux and anti-oxidant capacity, may be impaired. The association between high levels of HDL-C and adverse outcomes remains unclear.
Purpose: To study the relationship between elevated HDL-C levels (>60mg/dl) and adverse CV outcomes in an at-risk population.
Methods: Participants included 5,965 individuals (mean age 63.3±12.4 years, 35% female, 23% African American) enrolled in the cardiovascular biobank. Restricted cubic spline curves were used to examine the potential non-linear association between HDL-C and adverse outcomes using HDL-C of 50mg/dL as reference. Individuals were also stratified by HDL-C categories (<30, 31–40, 41–50, 51–60 and ≥60 mg/dL) and a Cox proportional hazards model was used to examine the association between HDL-C and adverse outcomes, with HDL-C 51–60 mg/dL as the reference group. All models were adjusted for age, race, sex, body mass index, hypertension, smoking, triglycerides, low density lipoprotein cholesterol, heart failure history, myocardial infarction (MI) history, diabetes, angiotensin-converting enzyme inhibitor or angiotensin II receptor blocker use, beta blocker use, statin use, aspirin use, estimated glomerular filtration rate, obstructive coronary artery disease.
Results: Over a median follow-up of 3.9 years (interquartile range 1.6 to 6.6 years), there were 769 CV death/non-fatal MI events. Restricted cubic spline regression models demonstrated a "U-shaped" association between HDL-C and CV death/non-fatal MI (Figure 1) and all-cause mortality (not pictured). Individuals with HDL-C <30 mg/dL (n=825) and ≥60 mg/dL (n=570) had an increased risk of all-cause mortality and CV death/non-fatal MI (HR 1.62; 95% CI=1.16–2.26, p=0.005 and HR 1.44; 95% CI = 1.01–2.06, p=0.04 respectively) after adjusting for aforementioned variables.



Association of HDL-C and CV death/MI

Conclusion: Elevated HDL-C levels are paradoxically associated with an increased risk of adverse CV events in an at-risk population, suggesting dysfunctional HDL and impaired atheroprotection.