

Sex Differences in Heart Failure: Perspectives from Asia

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The overall lifetime risk of heart failure (HF) is similar between men and women. Yet, differences emerge when we look at the specific HF subtypes. Men are predisposed to HFrEF whilst women predominate in HFpEF. Accumulating evidence from Asia are highlighting important differences with respect to how conventional risk factors of HF confer varying degree of risk in men and women. Asian women with concomitant diabetes and HF are predisposed to a unique '*lean diabetic*' phenotype, have high burden of chronic kidney disease, experience adverse left ventricular remodelling and suffer worse clinical outcomes, compared to their male counterparts. In addition to traditional risk factors, sex-specific factors may further add notable differences, e.g. peripartum cardiomyopathy, breast cancer therapy-induced cardiomyopathies and Takotsubo cardiomyopathy. Importantly, a common link between the HF syndromes women are predisposed to appear to be endothelial inflammation. Whether the higher risk of HFrEF in men (vs. women) is attributable to macrovascular coronary artery disease/myocardial infarction whilst coronary microvascular dysfunction could be instrumental in women remains as a hypothesis to be further investigated. Therapeutic responses to HF treatments are also different between sexes as treatment guidelines are predominately based on male-derived data. The low participation of women in HF clinical trials needs urgent attention.