Heartbeat: time to address sexism and sexual harassment in cardiology

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The proportion of cardiologists who are women remains low despite many decades of equal numbers of men and women entering medical school and continues to lag behind other medical specialties with respect to workforce representation. To further define the barriers and challenges facing women who choose to specialise in cardiology, Jaijee and colleagues¹ used a validated questionnaire sent to 890 UK consultant cardiologists to measure experiences of sexism and sexual harassment. In contrast to sexual harassment, sexism is defined as acts, words or behaviours that imply a person is inferior because of their sex. Of the 174 respondents, 24% were female. Overall, 62% of female cardiologists experienced some type of discrimination, most often related to gender and parenting, compared to 20% of male cardiologists. Sexual harassment affected professional confidence in 43% of women compared to 3% of men. In addition, sexism limited opportunities for professional advancement in 33% of female cardiologists compared to 2% of male cardiologists.

In the accompanying editorial, Babu-Narayan and Ray² discuss the perceived and actual barriers to improved representation of women in cardiology. 'There is no doubt that cardiology requires drive, dedication and commitment, but these should not be conflated with a requirement for excessively long working hours, 'presenteeism' and the exclusion of outside interests and family life either for men or for women.' Underrepresentation of women does matter. 'Lack of diversity of the leadership stifles creativity and innovation and gender inequality may help sexism or sexual harassment go unchallenged. Missing out on talent could cost lives.' As they conclude 'Effective strategies proven to mitigate the unwanted effects of gender or other stereotypes on women or men in cardiology are needed. These must address structural barriers to entry, to pay and to career progression in cardiology including

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Figure 1 Reproducibility, validity and time efficiency of the index-beat approach for E/e'. Comparison of the index-beat method versus averaging of 5 and 10 consecutive beats for: (1) reproducibility (ICC and 95% CI for within-beat, intraoperator and interoperator variability); (2) validity (beta coefficient for NT-proBNP with 95% CI); and (3) time taken to measure E/e' (mean seconds, with 95% CI). E/e', mitral E wave max/average diastolic tissue Doppler velocity from the septal and lateral annulus; ICC, intraclass correlation coefficient; NT-proBNP, N-terminal pro-B-type natriuretic peptide.

in academic cardiology, and may include continued and robust analysis of gender-related and intersectional pay disparity, transparency of metrics for and access to promotion, fair performance evaluation

for assessment for additional remuneration, investment in childcare, centralised budgets for parental leave and incentives to existing leaders to address the imbalance. Sexism and sexual harassment by

Figure 2 Cumulative survival of patients bridged to TAVI stratified according to EFT baseline and 1-month values. EFT, essential frailty toolset; TAVI, transcatheter aortic valve replacement.

SUMMARY OF ESC 2019 RECOMMENDATIONS:
LONG-TERM ANTITHROMBOTIC THERAPY IN PATIENTS WITH CCS

Figure 3 Decision algorithm summarising the approach to determining an optimum regimen of antithrombotic regimen suggested in the ESC 2019 CCS guidelines. APT, antiplatelet therapy; BD, twice daily; CAD, coronary artery disease; CCS, chronic coronary syndrome; CrCl, creatinine clearance; DAPT, dual antiplatelet therapy; DATT low-dose dual antithrombotic therapy; ESC, European Society of Cardiology; HF, heart failure; MI, myocardial infarction; NOAC, non-vitamin K antagonist oral anticoagulant; OAC, oral anticoagulant; OD, once daily; PAD, peripheral artery disease; PCI, percutaneous coronary intervention; SAPT, single antiplatelet therapy; TIA, transient ischaemic attack; VKA, vitamin K antagonist.

women or men are no more acceptable in cardiology than anywhere else and must no longer be tolerated.'

Heart failure (HF) is present or will develop in up to 50% of patients with atrial fibrillation (AF). However, the

Figure 4 The management of a patient with syncope based on risk stratification. LOC, loss of consciousness.

echocardiographic diagnosis of HF in patients with AF is complicated by the beat-to-beat variability in measures of ventricular function with an irregular heart rhythm. In a series of 160 patients with AF, Bunting and colleagues³ found that measurements of LV function based on a single index beat improved reproducibility and saved time compared to averaging 5–10 consecutive beats, with no effect on validity compared to natriuretic peptide levels (figure 1). The index beat approach is simply to measure a single cardiac cycle that follows two preceding R–R intervals of similar duration.

Minners and Jander⁴ comment that this data convincingly shows that the index-beat approach is more reproducible and quicker than averaging several consecutive beats. However, they caution that ventricular function may be underestimated if the index beat is not representative of overall heart rate. On the other hand, 'In clinical practice, the vast majority of echocardiography departments (including our own) assesses a 'typical' or representative beat whereby the echocardiographer chooses a single beat considered characteristic of the patient's haemodynamic situation.' 'Further work, such as the one presented by Bunting *et al*³ is clearly required to improve parameters of reproducibility, validity, as well as clinical applicability and relevance in our commitment to optimise care in patients with AF and heart failure.'

Balloon aortic valvuloplasty (BAV) continues to be performed in a small subset of patients, particularly those who require stabilisation prior to transcatheter aortic valve implantation (TAVI). Tumscitz and colleagues⁵ report the safety, efficacy and impact of frailty on outcomes after BAV using a minimally invasive radial artery approach (figure 2). The essential frailty toolset (EFT) provides a composite score from 0 to 5 based a chair test, cognition, haemoglobin and albumin. An EFT score of three or higher is associated with increased mortality.

Commenting on this study, Bongiovanni and Presbitero⁶ raise the question of whether BAV still has a place in the TAVI era. Their answer is: ‘Certainly, it will be an important procedure in different settings: first, to evaluate the clinical impact of transvalvular gradient reduction in patients with reduced ejection fraction and unclear functional reserve before definitive TAVI therapy; second, to allow urgent major surgery in severely ill patients with unclear prognosis; third, as a bridge to decision or to definitive

surgical or percutaneous treatment in countries with limited technologies and budget.’

The *Education in Heart* article in this issue summarises the approach to anti-thrombotic therapy in patients with chronic coronary syndromes.⁷ Key steps in the rather complex decision-making process are the presence of atrial fibrillation; prior myocardial infarction, revascularisation or definite coronary artery disease on imaging; bleeding risk; and ischaemic risk (figure 3).

A comprehensive review article in this issue of *Heart* provides a detailed approach to diagnosis and therapy of syncope (figure 4). Several algorithms provide a roadmap for patient management that will be of great value to clinicians.⁸

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