**THE CARDIOVASCULAR PRESENTATIONS AND OUTCOMES OF DIABETIC PATIENTS ADMITTED TO THE HEART HOSPITAL OVER 2 DECADES: INSIGHT FROM A HIGH-INCOME DEVELOPING COUNTRY.**

**A.A. El-Menyar1,2**, J. Al Suwaidi**3**, H. Al-Thani**4**, H. AlBinali**3**, R. Singh**3**

1. Clinical Research, Hamad General Hospital, Doha, Qatar

2. Clinical Medicine, Weill Cornell Medical College, Doha, Qatar

3. Heart Hospital, Hamad Medical Corporation, Doha, Qatar

4. Vascular Surgery, Hamad General Hospital, Doha, Qatar

A retrospective analysis of a prospectively collected data was conducted (1991-2012) including all diabetic patients admitted to the Heart Hospital (HH) in Qatar.

*Results*: Out of the 48,803 cardiovascular diseases (CVD) admissions, 19500 patients were diabetic (40%). Among diabetics, ST-elevation myocardial infarction (STEMI) (47.5%) was the frequent presentation, followed by unstable angina (28%), non-STEMI (24%), congestive heart failure (CHF, 23%), dysrhythmia (8.9%), PAD (0.6%) and cerebrovascular accident (0.4%). STEMI occurred at an earlier age (55±11) compared with NSTEMI (59±11) and CHF (63±10). PCI increased significantly from 3% in 1991 to 26% in 2012. On admission, aspirin, beta-blockers (BB) and ACEI use increased from 59% to 92%, 10% to 71% and 30% to 56%, respectively. At discharge, the use of statins increased significantly, from 4% to 78% across the study period. A total of 1112 CVD patients died with an annual mortality rate of 1 in 10,000 people. The overall trend of DM-related mortality decreased over the time. Diabetic Asian patients died 9 years earlier than diabetic Arabs (52.7±8 vs.61.5±11). Multivariate regression analysis revealed that predictors of age –adjusted mortality in diabetics were lack of BB use (OR 4.35; 95% CI:0.20 – 0.27), lack of ACEI use (OR 3.58; 95% CI:0.23 –0.32), myocardial infarction (OR 3.20; 95% CI:2.77 – 3.68), lack of aspirin use (OR 2.56; 95% CI:0.34 –0.45), and CHF (OR 1.75; 95% CI:1.50 –2.04).

*Conclusions*: the admission rate of diabetic patients in the HH is increasing; however, the mortality rate is decreasing. STEMI is the most common CVD presentation in young diabetic patients. The use of evidence-based medication is still far from the guideline recommendation; however, it has substantially improved. The lack of evidence-based CVD medications in diabetic patients is associated with 4 times increase in the mortality in the HH. More efficient primary and secondary prevention strategies are required in diabetic patients