

P01-507

CHRONIC MEDICAL CONDITIONS MEDIATE THE ASSOCIATION BETWEEN DEPRESSION AND CARDIOVASCULAR DISEASE MORTALITY

E. Atlantis<sup>1</sup>, Z. Shi<sup>1</sup>, B. Penninx<sup>2</sup>, G. Wittert<sup>1</sup>, A. Taylor<sup>1</sup>, O. Almeida<sup>3</sup>

<sup>1</sup>Medicine, The University of Adelaide, Adelaide, SA, Australia, <sup>2</sup>Department of Psychiatry and EMGO Institute of Health and Care Research, VU University Medical Center, Amsterdam, The Netherlands, <sup>3</sup>School of Psychiatry & Clinical Neurosciences and Western Australian Centre for Health & Ageing of the Centre for Medical Research, University of Western Australia, Perth, WA, Australia

Purpose: To determine whether chronic medical conditions mediate the association between depression and cardiovascular disease (CVD) mortality.

Methods: Data analyzed were from 6,394 subjects aged 25-74 years who participated in extensive health examinations in the NHEFS conducted between 1971 and 1975 and follow-up studies to 1992. CVD mortality was the endpoint. Depression predictors were clinically significant depressive symptoms at baseline by the GWB-D, and/or at 1982-84 by the CES-D ('baseline', 'new', or 'twice' depression). Chronic conditions were prevalent/incident high blood pressure, diabetes, and nonfatal CVD by examination and/or self-report. Mediation effects were assessed by stepwise adjustments of covariates and additive interactions in competing-risks regression models (accounting for other mortality causes) and logit models.

Results: Baseline, new, and twice depression were significant predictors of CVD mortality in competing-risks models adjusted for demographics (HRs 1.3, 1.4, and 2.0), but effects were progressively weakened and became non-significant after adjustment for lifestyle factors, prevalent and incident medical conditions, respectively. CVD mortality risk was 80% higher for depression plus incident nonfatal CVD than without (HR 4.0 vs. 3.2, additive interaction), and mediation effects of depression via chronic medical conditions (particularly via incident nonfatal CVD) increased the risk by 2 to 11% in logit models, independent of all covariates.

Conclusions: Several levels of evidence suggest that the association between depression and CVD mortality is partially mediated by prevalent/incident chronic medical conditions, as well as unhealthy lifestyle behaviors. Patients presenting with clinically significant depressive symptoms, particularly if persistent, should be assessed for both chronic conditions and lifestyle risk factors.