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Long-term mortality outcome related to CVD risk assessment and follow-up among 123,621 participants in the Vorarlberg Health Monitoring and Promotion Programme (VHM&PP)

H. Ulmer^a, C. C. Kelleher^b, G. Diem^c and H. Concin^c

^aInstitute of Biostatistics and Documentation, University of Innsbruck, Austria, ^bDepartment of Public Health Medicine and Epidemiology, University College Dublin, Ireland and ^cAgency for Social and Preventive Medicine, Bregenz, Austria.

Background and methods The impact on long-term mortality of comprehensive primary-care led cardiovascular screening programmes is controversial and few databases are sufficient in size and follow-up time. The Vorarlberg Health Monitoring and Promotion Programme (VHM&PP) in Austria comprises a standardised assessment protocol with repeated measurements in over 2/3 of the adult population. Recall is scheduled based on initial risk factor assessment. For this analysis we included those seen first between 1985–1994 linked to mortality by 1999.

Results Of 123,621 participants (44.5% males), 26.8% never returned (Group A), 15.3% were seen within 1.5 years (high risk Group B), 29.9% within three years (intermediate risk Group C) and 28.1% later (low risk group D). There were 4991 deaths during follow-up. Cox proportional hazard regression models, for both men and women separately, indicated that age, body mass index (BMI), systolic blood pressure (SBP), total cholesterol, triglyceride, smoking status, and non-national origin were all independent predictors of death. Having adjusted for these, rank order of risk of death among men remained highest in the non-returnees, relative to groups B (HR 0.546, 95% CI 0.505–0.631), C (HR 0.443, 95% CI 0.40–0.490) and D (HR 0.280, 95% CI 0.245–0.320). Similarly, among women adjusted mortality was still highest in the non-returnees, compared with group B (HR 0.617, 95% CI 0.549–0.695), C (HR 0.495, 95% CI 0.442–0.554) and D (HR 0.306, 95% CI 0.262–0.357).

Conclusion These data indicate the expected difference between healthy volunteers and programme non-

attendees but are notable in indicating the accuracy of the programme in categorising relative risk of long-term mortality and the independent benefit on mortality of programme participation.

Work readiness and adjustment in cardiac rehabilitation patients

F. T. O'Hagan^a, S. Thomas^a and R.-L. Franche^{a,b}

^aUniversity of Toronto and ^bThe Institute for Work & Health, Toronto, Canada.

Background This preliminary study was undertaken to examine the association between cardiac rehabilitation (CR) exposure, self-efficacy, sickness, job demands and social support on work readiness and adjustment (WRA) in patients with cardiac disease utilizing a novel graded seven-point scale (0—not ready return to work; 7—back to work and managing well) of WRA.

Methods Cross-sectional design with questionnaire ($n=102$) and clinical data ($n=45$) collected from patients (70% working; age 57 ± 10.7 y; 82% male, 73% married or equivalent, median duration of illness 31 weeks, 53% coronary artery bypass grafting, 57% myocardial infarction, 37% experiencing angina) at program entry ($n=51$) and 6–12 months ($n=51$) of CR participation. Data were analysed through correlation and multiple regression methods.

Results Patients who were working rated their WRA (5.69 ± 1.32) higher than those not working (2.85 ± 1.16 , t -test, $P < 0.001$). Patients with more exposure to CR indicated better WRA (5.79 ± 1.69) than those entering the program (4.10 ± 1.54). Forward stepwise regression produced a model of WRA dependent on physical health and role function ($B = 0.508$, $P < 0.002$), ST segment depression ($B = -0.340$, $P < 0.02$), physical work demands ($B = -0.320$, $P < 0.03$), vitality ($B = 0.266$, $P < 0.12$), emotional health and role function ($B = 0.216$, $P < 0.19$) and physical function ($B = -0.172$, $P < 0.29$).

Conclusion A seven-point scale of WRA is associated with work status and factors related to the person and environment. Measuring WRA in this fashion may expand our view of interventions such as CR and other factors in returning patients to optimal role function and quality of life.