

Angina Characteristics as Predictors of Trajectories of Quality of Life Following Acute Coronary Syndrome in the Transitions, Risks and Actions in Coronary Events-Center for Outcomes Research and Education cohort (TRACE-CORE)

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BACKGROUND: To describe longitudinal trajectories of health-related quality of life (HRQoL) after hospitalization with an acute coronary syndrome (ACS), their associations with baseline angina characteristics, and associations with anxiety, depression, and cognitive impairment.

METHODS: TRACE-CORE participants (N=1,613) completed the SF-36 during hospitalization for ACS and 1, 3, & 6 months post-discharge. Latent growth curves identified trajectories of physical and mental components of HRQOL (MCS and PCS) and sequential multiple logistic regression estimated associations between trajectories and angina characteristics.

RESULTS: Participants (N=1613) had mean age 63.3 (SD 11.4) years, 33.0% female, and 78.2% non-Hispanic white. We identified 2 MCS trajectories: AVERAGE and IMPAIRED HRQoL. The majority of participants (81.0%) had AVERAGE MCS at baseline (mean MCS 53.6) and slight improvement in scores over time. A minority (19.0%) had IMPAIRED HRQoL at baseline (mean MCS 36.7) and slight improvement in scores over time. We identified 2 similar PCS trajectories with similar patterns of scores over time: AVERAGE (71.1%) and IMPAIRED (28.9%) HRQoL at baseline. Adjusting for demographics & comorbidities, patients with less severe baseline angina were more likely to have AVERAGE MCS (odds ratio [OR]/10 unit change in severity 1.1) and PCS (OR 1.1) trajectories, and similarly for less frequent angina (MCS OR 1.2; PCS OR 1.3). The associations of MCS trajectory with severity and frequency lost significance after adjusting for psychosocial factors, whereas the PCS associations remained significant [All $p < 0.05$ unless noted].

CONCLUSIONS: About 1/3 of patients exhibited impaired 6-month HRQoL trajectories, which can be predicted by angina characteristics. Psychosocial factors may explain the prediction of mental, not physical, trajectories. Interventions to improve HRQoL after ACS should consider psychosocial factors and angina.

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