Towards Person-related Cardiac Care: Weighing the Evidence on Type D Personality

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The distressed or Type D personality refers to the combination of two personality traits, negative affectivity and social inhibition. Cardiac patients with this personality profile tend to experience negative emotions, but are not likely to express themselves towards other people. Type D personality can be easily assessed with the use of the 14-item DS14 self-report scale, and its prevalence ranges between 20%-35%. Clinical evidence indicates that Type D personality is an independent predictor of poor prognosis, including cardiac death and (recurrent) myocardial infarction, with the majority of odds ratios ranging between 2.5 and 6.8. Longitudinal research also indicates that Type D personality is a major determinant of depression, anxiety and poor perceived health status, with the majority of odds ratios ranging between 2.6 and 6.0. In addition, Type D personality has a modulating effect on the outcome of invasive interventions such as percutaneous coronary intervention, coronary bypass surgery, implantable cardioverter defibrillator treatment, and heart transplantation. Unlike depression, Type D is not confounded by disease severity, and Type D personality still predicted major adverse clinical events and cortisol dysregulation after adjustment for depressive symptoms. Apart from cortisol reactivity, other biological (cardiovascular reactivity, immune dysregulation) as well as behavioral (poor self-management, reluctance to consult clinical staff, unhealthy life style) mechanisms might mediate the relationship between Type D personality and prognosis. Overall, these finings indicate that the Type D construct has substantial predictive power, is associated with several pathways of disease, and may have important incremental value in clinical research and practice.

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