

Psychosocial Outcomes of Cardiac Rehabilitation in Working-Age Adults with Coronary Artery Disease: A Systematic Review

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Introduction. Coronary artery disease (CAD) imposes a substantial psychological burden on working-age adults, including depression, anxiety, and impaired health-related quality of life (HRQoL). Although cardiac rehabilitation (CR) is recommended for secondary prevention, its psychosocial effectiveness in this population remains insufficiently synthesised. This systematic review evaluated the effects of Phase II and III CR on depression, anxiety, and HRQoL in adults aged 18–65 years with CAD, identifying patterns and moderators of psychosocial benefit.

Methods. PubMed (MEDLINE), CINAHL, and Cochrane CENTRAL were searched from inception to 30 March 2026. Risk of bias was assessed using Cochrane RoB 2 for randomised controlled trials and modified ROBINS-I for non-randomised studies. Narrative synthesis was conducted owing to methodological and outcome heterogeneity. The review was prospectively registered in PROSPERO (CRD420261358131).

Results. Thirty studies involving approximately 6,600 participants across 17 countries were included: 16 randomised controlled trials, eight prospective or longitudinal observational studies, four retrospective or quasi-experimental studies, and two pre-post studies. Six themes emerged: CR was associated with reduced depression and anxiety, particularly among younger patients and those with greater psychological burden; HRQoL improved in 25 studies; cardiac anxiety required dedicated screening; programme completion influenced sustained benefits; home-based and digital programmes demonstrated comparable outcomes; and exercise frequency and psychological intervention intensity moderated psychosocial improvements.

Discussion. Phase II and III CR demonstrated psychosocial benefits in working-age adults with CAD.

Younger patients experienced substantial improvements, while programme completion emerged as an important determinant of sustained benefit. Home-based and digital delivery models may provide effective alternatives to centre-based rehabilitation.

Keywords: Cardiac Rehabilitation, Coronary Artery Disease, Working-Age Adults, Depression, Anxiety, Health-Related Quality of Life, Cardiac Anxiety

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