

An evaluation of the success of the 'Heart-Fit' phase IV cardiac rehabilitation programme in Newark, Nottinghamshire: A mixed-method approach

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Cardiovascular disease (CVD) is the most common cause of death in England and Wales, with cardiac rehabilitation being one of the best examples of long term condition management for CVD patients (Pluss et al., 2011: *Clinical Rehabilitation*, 25, 79-87). Phase IV cardiac rehabilitation involves the long term maintenance of health in the form of exercise programmes, such as 'Heart-Fit'. It has been recommended that mixed methods are required to evaluate CVD prevention programmes (National Institute for Health and Clinical Excellence, 2010), therefore this case study aimed to evaluate the success of a phase IV cardiac rehabilitation programme, both qualitatively and quantitatively, outlining the impact on participants. After ethical clearance from an institutional committee, eleven members (age = 71.2, stature = 1.71m, weight = 79.8kg) of the programme (male = 6, female = 5) volunteered to take part in the study. For eligibility purposes, participants attended the programme once a week. Physical measurements of blood pressure (BP), resting heart rate (RHR), Body Mass Index (BMI) were recorded before and after a twelve week intervention period. Both physical activity levels and smoking status were also recorded by a lifestyle questionnaire. Two focus groups (n = 6 & 5) were held to gain participant perceptions on their experiences relating to the performance of the programme. Paired-sample t-tests indicated statistically significant differences ($P < 0.05$) in systolic ($P = 0.008$) and diastolic ($P = 0.016$) BP and BMI ($P = 0.036$). No significant differences were detected with RHR, physical activity levels and smoking status (all $P > 0.05$) pre and post intervention. Using a process of thematic analysis, participants revealed six main themes as being important factors during the 12-week programme. These included the instructor's influence, the social nature of the group, the availability of clinical observation, psychological development and the perceived beneficial physical improvements made. The CVD risk factors influenced by the programme, in accordance to past literature, were systolic and diastolic BP and BMI. Similar themes have been identified in studies that have evaluated the effectiveness of other exercise referral schemes. Qualitative data collection should be considered alongside quantitative measures in evaluations of similar interventions. Future phase IV cardiac rehabilitation programmes need to gain a greater insight into the patient experience. This will enable health planners and policy makers to generate a sense of context on how these programmes operate at local levels and develop models of best-practice.

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