Background and Purpose

The Pilates Method of exercise has the ultimate goal of transforming the body into a perfect instrument of will. Pilates has been demonstrated to improve strength, endurance, breathing control, core musculature, mindfulness and with specific adaptions, cardiorespiratory and aerobic fitness all of which are significantly important in cardiac rehabilitation programs.

The purpose of this case report is to demonstrate how the Pilates Method of exercise can be utilized as an intervention in cardiac rehabilitation programs.

Case Description

This theoretical case report looks at the typical patient seen in the cardiac rehabilitation setting: a 65 year old male who is overweight, deconditioned, has a past medical history of diabetes mellitus, hypertension, COPD, and orthopedic conditions. This patient presents with the following problems list: decreased aerobic capacity, poor anthropometric results, muscle weakness, postural dysfunction, and breathing pattern dysfunction.

Proposed Intervention

The proposed intervention plan will take place in phase 3 of the cardiac rehabilitation setting. The intervention program will take place over 12-16 weeks with 3-5 sessions per week and consist of standard aerobic conditioning, Pilates, home exercise program (HEP), and patient education. The Pilates aspect of the program will be divided into three phases, 12 sessions each. Phase 1 will be the development of a basic understanding of the Pilates principles and exercises: Phase 2 will focus on creating a baseline level of core strengthening and general endurance: Phase 3 will focus on increasing the load placed on the cardiovascular system by modification of rest time, increased repetitions, or modifying exercises by making them more challenging.

Expected Outcomes

The proposed intervention is expected to demonstrate improvements in aerobic capacity, anthropometric values, musculature strength, postural alignment, more efficient breathing patterns, and increased functional independence. The following standardized measurements will be taken: A cardiopulmonary exercise test (CPET), weight, circumference measurements of waist and hip, body fat % through the use of calipers, and manual muscle testing of the UE and LE.

Discussion

Cardiac intervention programs need to be all-encompassing as patients are generally dealing with multiple comorbidities which can complicate and compromise recovery. The Pilates Method of exercise can be very efficient and effective in improving functional capacity when combined with a standard aerobic training program (Guimarães, Carvalho, Bocchi, & d’Avila, 2012). Preliminary research and this theoretical case report are beginning to show the efficacy of Pilates in the cardiac rehabilitation setting; however more research is recommended to justify this hypothesis.