**Introduction**

- People with chronic heart failure often suffer from decreased functional capacity.
- Disease symptoms such as fatigue, dypnea, and lack of energy, in combination with the disease's impact on psychosocial, emotional, and occupational functioning, affect patients' quality of life.
- Physical activity can improve many of these adverse side effects.
- Adherence to exercise programs is low: 20-25% of patients drop the program after the first 3 months and 40-50% within the sixth to twelfth month.
- Dance is a form of exercise that has physiological and psychosocial benefits.
- Also enhances balance, strength, and cardiovascular functioning.
- Research supports that Greek traditional dancing does improve functional capacity and psychological conditions of breast cancer survivors.

**Methods**

- **Randomized Controlled Trial**
  - 51 Greek male patients (67±5.5 years of age) with chronic heart failure.
  - Randomly assigned by random allocation to a dance group (Group A), a formal exercise group (Group B) or a control group (Group C).
- **Tests & Measures**
  - Cardiopulmonary exercise testing.
  - Functional ability assessment
  - Strength Testing: Baseline Leg Dynamometer
  - Assess performance in specific activities
- **Quality of Life evaluations**
  - Berg Balance Scale
  - Cardiopulmonary exercise testing
  - Group A Program: 40 minutes of Greek traditional dancing; dances lasted 3-4 minutes with 15 second breaks in between.
  - Group B Program: 20 minutes aerobic exercise and 20 minutes resistance training.
  - Group C Program: No formal intervention, asked to continue their usual sedentary lifestyle.

**Results**

- **Group A** Program increased peak oxygen consumption by 16%.
- One other study concluded that an 8 week Aerobic dancing program improved functional capacity and quality of life.
- Improvements of peak O₂ consumption were correlated with the physical health subscale of SF-36 (r=0.602, p < 0.05) and total score of intrinsic motivation (r=0.578, p < 0.05).

**Discussion**

- **Group A** than the traditional exercise group.
- All patients displayed increased health-related quality of life.

**Clinical Significance**

- Exercise training with traditional dancing has an additional benefit over and above formal exercise training in patients with heart failure.
- A long-term exercising training program with Greek traditional dances in patients with chronic heart failure is effective in improving functional capacity and quality of life.

**Conclusion**

- A cardiac rehab program with Greek traditional dances has favorable effects on functional capacity in patients with chronic heart failure, similar to that observed following a formal exercise training program.

**Article #2: Supporting Evidence**

- Systematic review and meta-analysis looking at the effects of aerobic exercise on NTproBNP and minute ventilation/CO₂ (VE/VCO₂) slope.
- Aerobic exercise decreased both VE/VCO₂ slope and NTproBNP leading to a better ventilatory class.

**Article #3: Refuting Evidence**

- A randomized controlled trial that sought to determine the impact on group-based exercise on physical activity levels in patients with CHF as well as investigate a potential association between baseline values for physical activity, physical fitness, sitting time and HRQL.
- The researchers determined that a group exercise program did not improve participation in physical activity, as determined by monitoring activity using pedometers.

**Summary**

- Aerobic dance program improves functional capacity, cardiorespiratory fitness, and quality of life for patients with chronic heart failure.
- Aerobic exercise decreases NTproBNP and VE/VCO₂ slope, allowing people with chronic heart failure to be classified into a better ventilatory class, ultimately improving cardiorespiratory fitness.
- Exercise participation did not improve physical activity levels with patients with chronic heart failure.
- However, dance as an aerobic exercise improves intrinsic motivation, which would improve group participation.