Abstract:

Background: Beneficial effects of exercise training on depressive disorders have been documented in several studies, some of them in populations with cardiovascular disease. This study aims to evaluate the impact of cardiac rehabilitation (CR) on anxiety, depression and overall distress and if there is any difference between patients over 80-years-old patients compared to younger individuals.

Methods: We conducted a prospective, cohort, single-centre study. All consecutive patients that were referred between April 2014 and October of 2018 to CR and were able to do physical activity were included. The Hospital Anxiety and Depression Scale (HADS) was used as a screening tool for anxiety (HADS - A), depression (HADS - D) and overall distress (HADS - total, or HADS - tot). Cut-off points for positive screening were HADS-A ≥ 7, HADS-D ≥ 4 and HADS-tot ≥ 14. The change from a positive to negative status for anxiety, depression and overall distress was the primary outcome.

Results: There were 39 (8%) over 80-years-old patients among the 464 patients that fulfil inclusion criteria. The median of weeks in therapy was 10 (IQR 8 - 13), with a median of sessions per week of 4 (IQR 3 - 5). There were significantly more patients positive for anxiety (51 % vs 27 %; p = 0.003), depression (72 % vs 39 %; P = 0.001), and overall distress (38 % vs 21 %; p = 0.03) in the elderly group. After the CR, both groups improved in all scores (Figure 1). The was no significant difference between the elderly and the younger group regarding the proportion of patients that change from positive to a negative screening after CR (55% vs 56% for anxiety; 42% vs 56% for depression; 60 % vs 71 % for overall distress in the older and younger group respectively).

Conclusion: Anxiety, depression and overall distress are common in patients with CD, and its prevalence is higher in those over 80-years-old. Cardiac rehabilitation improved overall scores and half of the patients screened positive were negative at the end of the program, irrespectively of age.