Enhancing Quality of Life in Cardiovascular Patients: The Role of Comprehensive Interventions and Cardiac Rehabilitation

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Introduction: Cardiac rehabilitation is an established strategy to improve cardiovascular outcomes in patients with Acute Coronary Syndrome (ACS) and Heart Failure (HF). However, not all patients can participate in such programs. Intermediate interventions focused on lifestyle modification may be a potential strategy to improve outcomes. Depression and anxiety are common in patients with CVD and are linked to increased mortality. The Hospital Anxiety and Depression Scale (HADS) is a 14-item tool used to measure anxiety and depression symptoms and has been shown to be useful in assessing the psychological well-being of patients undergoing cardiac rehabilitation.

Objective: The objective of this retrospective study was to evaluate the impact of different levels of intervention on the quality of life of patients after cardiovascular events - ACS and CHF - in terms of depressive and anxious outcomes.

Materials and Methods: The study analyzed 56 patients who were previously hospitalized in the Cardiology department within one year: 47 for ACS and 9 for decompensated HF. After discharge, 19 patients attended a cardiac rehabilitation program (group 1), 19 had regular cardiovascular risk appointments and educational sessions conducted by psychiatrists, nutritionists, physiatrists, and cardiologists, but without participating in a physical rehabilitation program (group 2), and 18 patients were selected as controls without any of previous strategies (group 3). The group 1 intervention included also the measures implemented in group 2. All participants signed informed consent and completed the HADS questionnaire.

Results: The average age of the participants was 54.9 ± 9.9 years, with 29% females, and an average of 2.7 ± 0.6 cardiovascular risk factors. There were no significant differences in the distribution of ACS or decompensated heart failure between the groups. Group 1 predominantly presented a normal pattern of HADS scores (56% vs 40% vs 4%), respectively for group 1, 2 and 3. Conversely, in group 3 compared with group 1 and 2, there was a predominance of the abnormal score, respectively (50% vs 17% vs 33.3%); p <0.01.

Conclusion: The results suggest that patients who underwent regular appointments/education and cardiac functional rehabilitation exhibited lower levels of anxiety and depressive symptoms.

In conclusion, the study indicates that a comprehensive intervention continuum, including cardiac rehabilitation and regular appointments/education, can significantly improve patients’ quality of life and reduce their cardiovascular risk. Patients who undergo cardiac rehabilitation may experience the greatest benefits. The findings support the potential value of intermediate interventions focused on lifestyle modification as a strategy to improve outcomes for patients who cannot participate in a rehabilitation program.

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\text{Age (years)} & 54.0 \pm 9.9 & \text{C-LDL (mg/dL)} & 131.0 \pm 51.0 \\
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\text{Female (\%)} & 29.0 & \text{LVEF (ml/m2)} & 49.5 \pm 12.6 \\
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\text{NT-proBNP (pg/mL)} & 570.3 \pm 9.9 & \text{CVRF (n)} & 2.7 \pm 0.6 \\
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\text{HbA1C (\%)} & 5.9 \pm 0.9 & \text{ACS (n, \%)} & 47 (84\%) \\
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\text{Creatinine (mg/dL)} & 1.0 \pm 0.3 & \text{HFrEF (n, \%)} & 9 (16\%) \\
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Table 1 Clinical and sociodemographic characteristics of enrolled patients.
Figure 1. HADS score according to different levels of intervention