



# Which is the Level of Adherence to Rehabilitation Programs Among Heart Failure Patients? A Case Report

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## Abstract

Heart failure is a clinical syndrome that is easily treated with medications and lifestyle interventions, however, failure to comply with treatment leads to poor clinical outcomes, repeated hospitalizations, complications, worsening of the disease, an increase in health care costs even death. Adherence of patients with heart failure to treatment is one of the main goals of daily clinical practice. This paper presents a case of a male patient suffering from heart failure indicating a low level of adherence to medical instructions, particularly to the attendance of a rehabilitation program.

**Keywords:** adherence, rehabilitation programs, heart failure

## 1. Introduction

Heart failure is a clinical syndrome with a rapid increase worldwide. About 900,000 people in the United Kingdom currently suffer from heart disease deficiency [1]. The incidence of cardiac deficiency is related to age, with an average age of 76 years at the first diagnosis [2–4]. The Minnesota study showed that the prevalence of cardiac deficiency in a population over 45 years was 2.2% [4]. People over 65 years represent more than 75% of heart failure cases in the USA, while in Europe, people over 70 years make up 88% of young people cases [5].

The disease has a poor prognosis, and specifically, 30–40% of patients who are diagnosed with heart failure die within a year but at continuity, mortality appears to be less than 10% per year [6–8].

In recent years it has proven to be one interaction between adherence to the therapeutic instructions and subsequent prognosis [9]. Health professionals should encourage the active participation of patients in the context of co-administration decisions and take action by focusing on the patient with the ultimate aim of improving adherence. It is important for the patients to develop realistic expectations from the course of the disease and to adopt individual responsibility regarding concerns about the treatment of the disease [9].

This paper presents a case of a male patient suffering from heart failure indicating a low level of adherence to medical instructions, particularly to the attendance of a rehabilitation program.

## 2. Case Report

A Greek man, 57 years old, who was diagnosed with heart failure at 56, started following treatment by taking a number of pills. He is married, with a low educational level, and has retired. Almost a year now, this man presents depressive symptomatology, including physical and mental fatigue, sleep disorder, loss of interest or pleasure, symptoms of dysphoric mood, feelings of worthlessness, and suicidal ideation.

He does not appear to be convinced about the necessity and the effectiveness of the treatment followed, as well as the participation in a rehabilitation program, including exercise. Apart from heart failure, this man has identified other comorbidities, like hypercholesterolemia and hypertension.

## 3. Discussion

Based on the above description of the case study, it is clear that the level of adherence of this patient has been affected by various factors, such as depression, low educational level, treatment beliefs, and the existence of comorbidities. This finding is in line with

other similar research findings in the context of investigation of different chronic diseases.

Particularly in a study by Theofilou [10], the results showed that hemodialysis patients had demonstrated a negative association between the level of medication adherence and depressive symptoms. Patients with depressive symptoms report more feelings of hopelessness, compromising cognitive abilities [10–13].

Van der Wal et al. [14] showed that the most significant barriers to adherence to medical instructions were depressive symptomatology and low educational level. Moreover, Percival et al. [15] emphasize that a central role in adherence is the way patients perceive and manage the disease. In particular, heart failure patients who possess a strong belief in the necessity of their treatment are more likely to show better adherence. Also, identified comorbidities reported as predictors of exercise adherence were hypercholesterolemia and hypertension [16].

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