

# Happiness, Hope and Affection as Predictors of Quality of Life and Functionality of Individuals with Heart Failure at 3 Months Follow Up

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## Introduction:

Meeting the actual role of positive psychology, begins to be recognized the contribution of positive variables in health outcomes.

## Objective:

To know the contribution of happiness, hope and affection individually and as a whole in the quality of life and functionality of individuals with heart failure.

## Population and Methodology:

128 individuals with heart failure, 98 men and 30 women,  $61.9 \pm 12.1$  years of age,  $6.6 \pm 3.9$  years of school and 74,2% retired because of this disease.

56,3% were in Class III of New York Heart Association, with poor left ventricular ejection fraction ( $25.3 \pm 6.2$  %).

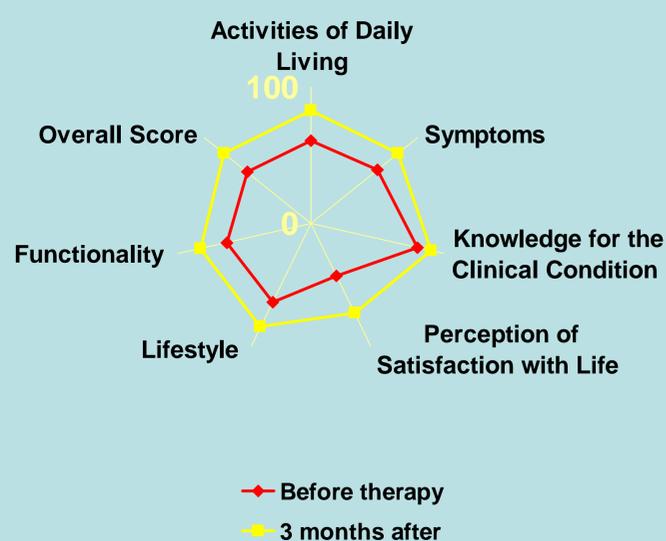
The clinical history was of  $9.4 \pm 8.5$  years for this heart disease and had at least one hospitalization due to heart failure with 51,6% having ischemic heart disease.

This individuals underwent appropriated medical therapy : cardiac resynchronization (n=52), implantable cardioverter-defibrillator (n=44), valvular surgery with coronary artery bypass graft surgery (n=14), optimizing drug therapy (n=10) and heart transplant (n=8). They were evaluated in the hospital, just before the intervention, regarding the quality of life by the Kansas City Cardiomyopathy Questionnaire (KCCQ) (Green et al., 2000), hope by the HOPE scale (HOPE) (Snyder et al., 1991), Affection by the Positive and Negative Affect Schedule (PANAS) (Watson et al., 1988) and in the outpatient clinic within 3 months, regarding the functionality by the New York Heart Association classification and by physical exercise, left ventricular ejection fraction, happiness by the Subjective Happiness Scale (SHS) (Lyubomirsky & Lepper, 1999) and the quality of life by the Kansas City Cardiomyopathy Questionnaire (KCCQ), as validated for the Portuguese population.

## Results:

In the third month after medical therapy:

- Left ventricular ejection fraction increased to  $30.78 \pm 10.1$  %;
- 74,8% were in class II of the New York Heart Association Classification;
- Quality of life as increased in their five domains and in the functionality and overall score summaries



	SHS	HOPE Global	PANAS	
			Positive affect	Negative affect
KCCQ				
Activities of Daily Living	0,28 **	0,01	0,06	-0,15
Symptoms	0,25 **	-0,01	0,12	-0,20 *
Knowledge for the clinical condition	0,12	0,22 *	0,01	0,08
Perceptions of satisfaction with life	0,39 **	0,05	0,11	-0,29 **
Lifestyle	0,29 **	0,16	0,15	-0,23 *
Functionality	0,27 **	-0,01	0,10	-0,17
Overall score	0,31 **	0,04	0,12	-0,21 *
New York Heart Association Classification	-0,19 *	0,12	-0,14	0,03
Physical exercise	-0,19 *	0,01	-0,26 **	0,10

p<0,05 \*; p<0,01 \*\*

Following the tendency of the individually contribution of this variables as shown by the correlations, when evaluating them together using linear regression we found that:

- Happiness has a unique contribution to quality of life, except to the knowledge for the clinical condition domain where hope takes this contribution;
- Positive affect has a unique contribution for physical exercise;
- Negative affect as a contribution along with happiness to the perception of satisfaction with life dimension with this variables predicting this outcomes ( $p < 0.05$ ).

## Conclusion:

Positive variables are important for the outcomes in people with heart failure