

# DESCRIPTIVE ANALYSIS OF DEPRESSIVE SYMPTOM SEVERITY AND QUALITY OF LIFE IN HEART FAILURE

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## Objective

Describe QOL and depression severity in heart failure.

## Background/ Significance

Heart Failure (HF) affects more than 26 million adults worldwide. Depressive symptoms in HF patients have a prevalence of at least 48% (Gottlieb 2004). Due to the heightened prevalence of depression in cardiovascular patients, the American Heart Association (AHA) recommends screening patients for depression (Lichman 2008). Depressive symptoms are associated with poor outcomes in HF.

Depression and HF have bidirectional effects through both biological and psychosocial mechanisms. In general, functioning impairments are closely correlated to depression severity. HF symptoms greatly restrict patients' daily physical activities. Among cardiac patients, those with HF reported more depression and significant mood disruption compared to patients with other cardiac illnesses. Among chronic illnesses, HF patients reported the poorest physical and social functioning. HRQoL is markedly decreased among HF patients compared to the general population. Furthermore, a poorly rated HRQoL is more common among depressed HF compared to non-depressed HF patients and spouses.

Surprisingly, the severity of heart failure is a weak predictor of HRQoL. The largest predictor of poor HRQoL was the severity of depression. Depressed HF patients experience worsening of cardiac functioning and perform worse on physical exams, such as the 6-minute walk test. Studies report that HF patients with more severe physical symptoms experience greater depression severity. Depressed HF patients report lower mental and physical health scores, after adjusting for relevant variables.

## Method

We conducted a descriptive analysis of clinical and demographic characteristics of first half of the recruited patients with depression in heart failure patients from our current PCORI-funded trial (n=208).



Image Credit: <http://biomedicine2u.blogspot.com/2009/07/why-depression-can-cause-heart-failure.html>

## Results

Variable	n=208	N (%)
Age		Mean=59.6 SD:15.7
Female		92 (44.2)
Race		
American Indian/ Alaska		3 (1.4)
Asian		14 (6.7)
Black/AA		71 (34.1)
Caucasian/White		101 (48.6)
Native Hawaii / Pacific Isl		1 (0.5)
Other		18 (8.7)
Hispanic		
Hispanic		28 (13.5)
Not Hispanic		171 (82.2)
Unknown		9 (4.3)
Marital Status		
Divorced		38 (18.4)
Married		81 (39.1)
Separated		1 (0.5)
Single		70 (33.8)
Widowed		17 (8.2)
NYHA		
Class II		103 (49.5)
Class III		98 (47.1)
Class IV		7 (3.4)
Ejection Fraction		
Preserved (> 40%)		104 (50.0)
Reduced (≤ 40%)		104 (50.0)
Hx of Depression		88 (42.3)
Hx of Antidep.		81 (39.5)
Hx of Psychotherapy		67 (32.8)
Hx of Anxiety D/O		67 (32.2)
History of PTSD		24 (11.6)

## Results

Variable	Mean (SD)
PHQ-9	15.0 (3.5)
MOCA	26.8 (2.2)
SF-12	
Physical Functioning	31.0 (8.3)
Role Physical	32.7 (8.3)
Bodily Pain	37.2 (13.5)
General Health	31.0 (9.0)
Vitality	38.4 (9.7)
Social Functioning	36.1 (11.4)
Role Emotional	32.3 (12.0)
Mental Health	36.5 (10.1)
Physical Component	33.2 (7.9)
Mental Component	37.3 (10.3)
KCCQ	
Physical Limitations	38.8 (27.9)
Symptom Stability	31.6 (24.0)
Symptom Frequency	39.6 (25.6)
Symptom Burden	40.2 (27.6)
Total Symptom	39.9 (25.4)
Self-Efficacy	72.4 (27.3)
Quality of Life	32.7 (21.0)
Social Limitation	31.7 (26.5)
Overall Summary	35.9 (21.0)
Clinical Summary	39.4 (23.5)

## Conclusion

HRQoL in heart failure patients with depression is severely impaired. C/L psychiatrists are best positioned to provide evidence-based treatment of depression in heart failure leading to a significant positive impact on HRQoL and overall health.

## References

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