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### Title

Heart Failure, the Hidden Problem of Pain

### Permalink

<https://escholarship.org/uc/item/0195v5pj>

### Journal

CIRCULATION, 118(18)

### ISSN

0009-7322

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### Publication Date

2008

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Peer reviewed

## CLINICAL SCIENCE

### Abstract 4056: Heart Failure, the Hidden Problem of Pain

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Published: October 28, 2008

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## Abstract

**Background:** Although dyspnea and fatigue are hallmark symptoms of chronic heart failure (HF), clinicians may under-recognize the burden of pain, despite the fact that it is debilitating to patients and poses unique therapeutic challenges. Guided by the conceptual model of 'total pain,' this study assessed pain in chronic HF and identified contributing factors.

**Methods and results:** As part of a multicenter study to improve pain management in veterans (Help-Vets), 96 veterans with chronic HF (96% male, aged  $67 \pm 11$  years) completed self-report measures of symptom frequency, pain severity and interference (Brief Pain Inventory [BPI]), functional status (Functional Morbidity Index [FMI]) and psychological state (Patient Health Questionnaire [PHQ]-2 for depression and Generalized Anxiety Disorders [GAD]-2 for anxiety). Single items from BPI interference and the Quality of Life End of Life (QOL-e) measured social and spiritual well-being. Demographic and clinical variables were obtained by chart audit. Correlation and linear regression models evaluated physical, emotional, social, and spiritual factors associated with pain. Fifty three (55.2%) HF patients reported having current pain with a majority of those (36 [67.9%]) rating their pain as moderate to severe (pain  $\geq 4/10$ ). The presence of any pain was reported more frequently than dyspnea (67 [71.3%]) vs. 58 [61.7%]). In bivariate analyzes age ( $p = 0.02$ ), psychological (depression:  $p = 0.002$ ; anxiety:  $p = 0.001$ ), social ( $p < 0.001$ ), spiritual ( $p = 0.010$ ) and physical (health status:  $p = 0.001$ ; symptom frequency:  $p = 0.000$ ; functional status:  $p = 0.002$ ) well being were correlated with pain severity. In the resulting model, 38% of the variance in pain severity was explained ( $p < .001$ ); only interference with social relations ( $p < 0.001$ ) and the number of other symptoms present ( $p = 0.007$ ) contributed significantly to pain severity.

**Conclusion:** In this pilot study, a majority of patients reported pain, and most of those reported it as moderate to severe. The presence of pain was more common than dyspnea. The strong, independent association of overall pain with social factors underscores the potential role of multidisciplinary support to improve symptoms and well being in HF.