## Impact of Sleep Disturbances on Quality of Life in Heart Failure Patients

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Patients with heart failure (HF) commonly have disrupted sleep, reduced sleep efficiency, and a feeling of fatigue. We sought to explore the relationship between sleep disturbances and quality of life (QOL) in HF patients.

Methods: After informed consent, patients with HF attending a HF clinic or day treatment program were administered Hebrew validated versions of the Pittsburgh Sleep Quality Index, The MOS 36-item Short Form health survey (SF-36), and the Visual Analog Mood Scale. For quality of life analysis, the Physical Role, Physical Functioning and Bodily Pain portions were excluded so as to avoid the confounding factor of physical illness.

Results: 73 patients participated in the study. Patient mean age was 75+10yrs, with 57% males. Etiology of HF was ischemic in 46%, valvular in 29%. NYHA class average was 3.2, with 17% class 2, 44% class 3, and 39% class 4. 78% of patients met criteria for a significant sleep disturbance, compared with  $\sim$ 30% reported in healthy elderly patients. Degree of sleep disturbance was significantly correlated with all measures of quality of life other than impact of emotional problems on daily life: general health (r=-.264 p=.022); vitality (r=-.535, p<.001); social functioning (r=-.349, p=.002); emotional well-being (r=-.469, p<.001); and mental health (r=-.483, p<.001). Sleep duration (r=-.262, p=.02), sleep disorder (r=-.477, p<.001), sleep latency (r=-.387, p=.001), sleep effectiveness (r=-.305, p=.008), and sleep quality (r=-.351, p=.002) were all correlated with poor quality of life. Sleep disturbance was more common in woman, but was not affected by NYHA class, BMI, total daily dose of furosemide, PA pressure, or presence of atrial fibrillation,

Conclusions: Sleep disturbances account for a significant proportion of disruption in quality of life in heart failure patients, and warrant further attention by HF programs.