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What Factors Increase Anxiety and Depression in Advanced Heart Failure?

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**Background:** For many individuals, the diagnosis of heart failure (HF) provides a great emotional challenge that may lead to anxiety and depression, thus jeopardizing their overall mental health and ultimately may contribute to morbidity and mortality. Further research on determinants of anxiety and depression in this population is needed to provide insight on potential approaches for minimizing anxiety and depression. We examined the incidence of anxiety and depression in a cohort of advanced systolic HF patients and tested the hypothesis that perceived control, financial stability, and emotional support (i.e., presence of someone in whom to confide) is associated with the development of anxiety and depression. Methods: Data were collected from 241 patients from a single HF clinic using the Brief Symptom Inventory-Anxiety, the Patient Health Questionnaire Depression Scale, and the Control Attitude Scale to report anxiety, depression, and perceived control scores, respectively. To measure financial stability and emotional support, patients were asked: 1) how well their household income allowed them to make ends meet, and 2) whether they had someone in whom to confide. **Results:** Patients were age,  $56.7 \pm 13.0$  years, male (70%), Caucasian (70%), retired (75%), and married (81%), NYHA Class III (53.9%) with mean LVEF,  $31.2 \pm 5.4$ ) In all, 38.2% of the patients scored above the normative level for anxiety, and 19.9%, above the normative level for depression. In a multivariate analysis, perceived control (odds ratio [OR] = .890; 95% confidence interval [CI] = .827 - .957, p = .002) and depression (OR = 1.229; 95% CI = 1.143–1.321, p < .001) were independent predictors of anxiety. Perceived control (OR = .892; 95% CI = .814-.977, p = .014), financial stability (OR = 2.511;95% CI = 1.345-4.688, p = .004),emotional support (OR = .921; 95% CI = .873-.972, p = .003), and anxiety (OR = 1.842; 95% CI = 1.298-2.614, p = .003) .001) were independent predictors of depression. Conclusion: Our findings indicate that measures of perceived control, financial stability, and emotional support are associated with anxiety and depression in HF patients. Because patient perceptions of control and financial and emotional support are related to dysphorias known to influence morbidity and mortality, regular assessment of patient concerns and providing access to appropriate services and treatment should be considered.