

# Depression Screening in Heart Failure Patients

Amee Siegel BSN, RN

*Lehigh Valley Health Network, amee.siegel@lvhn.org*

Alyx Howard BSN, RN

*Lehigh Valley Health Network, alyxandra\_m.howard@lvhn.org*

Miranda Carter BSN, RN

*Lehigh Valley Health Network, miranda\_l.carter@lvhn.org*

Kristina Koble BSN, RN

*Lehigh Valley Health Network*

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# Depression screening in Heart Failure patients

Amee Siegel, Alyx Howard, Miranda Carter, Kristina Koble

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# Purpose

Studies have shown that patients with a diagnosis of congestive heart failure also experience clinical depression. Depression among these patients correlates to an increase in mortality and morbidity. These patients also express a decreased quality of life.

This study is to investigate whether LVHN's CHF population is properly identified with depression and receiving prompt and adequate treatment.

# PICO QUESTION

In congestive heart failure patients, does depression screening versus no depression screening aid in early identification and decreased mortality rates?

- P:** Congestive Heart Failure Patients
- I:** Depression Screening
- C:** No Depression Screening
- O:** Early Identification and Prompt Treatment to Decrease Mortality

# EVIDENCE

- **Factors associated with Depressive Symptoms in Patients With Heart Failure.** *Graven et al. 2014.* Findings from this study indicate individuals who experience increased HF symptoms also experience more depressive symptoms. These findings highlight the potential for psychological distress as HF progresses and symptoms increase. Findings in this study also suggest that individuals with a larger social network perceived a greater level of social support, suggesting that the availability of social network enhances individuals' perceptions of social support. Individuals in this sample reported less actual and perceived support also reported more depressive symptoms.
- **Should patients perception of health status be integrated in the prognostic assessment of heart failure patients? A prospective study.** *Di Giulio, P. 2014.* In a population of HF patients of any etiology, the patients perception of health status provides robust prognostic information on the medium-term mortality, on the top and independently of the full package of the other clinical and instrumental measures.

# EVIDENCE

- **Newly diagnosed heart failure: Change in quality of life, mood, and illness beliefs in the first 6 months after diagnosis.** *Mulligan et al. 2012.* This study has shown that patients report significant reductions in levels of anxiety and improvements in QoL in the 6 months following the diagnosis of HF. These changes were accompanied by changes in beliefs that reflected patients' growing recognition of HF as a chronic illness, as they perceived HF to be longer lasting and less curable at the 6-month follow-up than at baseline. The extent of the reduction in patients' anxiety over the 6-month period was associated with reductions in their concerns regarding treatment. It is perhaps understandable that many patients will have concerns about starting new medications but these might be expected to reduce over time as their treatment becomes familiar and they derive benefits from it.
- **Living with heart failure: Psychosocial resources, meaning, gratitude and well-being.** *Sacco et al. 2014.* There may be advantages to predicting how psychosocial resources may influence well-being longitudinally for both patients and their health care providers. Understanding of these relationships may potentially enhance the capabilities of health care providers to more sensitively care for HF patients. While findings were exploratory, gratitude also appeared to play a role in the well-being of these HF patients. Given a paucity of literature regarding gratitude and well-being in HF patients, it may be useful to further examine the potential benefits of a grateful mindset in HF interventions and treatment.

# EVIDENCE

- **Depression increasingly predicts mortality in the course of congestive heart failure.** *Junger et al. 2005.* Depression score predicts mortality independent of somatic parameters in CHF patients not treated for depression. Depression was an important independent risk factor for mortality of CHF patients. Screening for depression is a simple, well-established, noninvasive method that a patient can self-administer. Excellent pharmacological treatments are available to improve prognosis. Negative effect of depression on prognosis seems to evolve slowly, there may be sufficient time to initiate this treatment.
- **Relationship of depression to death or hospitalization in patients with heart failure.** *Sherwood et al. 2007.* Symptoms of depression were associated with an adverse prognosis in patients with HF after controlling for HF severity. Antidepressant medication use was associated with increased likelihood of death or cardiovascular hospitalization. Suggests that patients with HF requiring an antidepressant medication may need to be monitored more closely. Depression in patients with HF is associated with poorer prognosis. High prevalence of depression in patients with HF, coupled with its associated with poorer outcomes, underscores the need to assess these patients for clinical depression and to develop and evaluate safe and efficacious treatments to ameliorate their depressive symptoms and improve clinical outcomes. Increased symptoms of depression are associated with worsened prognosis and that HF disease severity does not account for the association of depression with adverse outcomes

# EVIDENCE

- **Worsening depressive symptoms are associated with adverse clinical outcomes in patients with heart failure.** *Sherwood et al. 2011.* Worsening symptoms of depression are associated with poorer prognosis in HF patients. Routine assessment of symptoms of depression in HF patients may help to guide appropriate medical management. Symptoms of depression are associated with adverse clinical outcomes, including cardiovascular hospitalization and death. Worsening of depression additionally was associated with such adverse events. A 1-point change in BDI score was associated with a 7% alteration in risk for cardiovascular hospitalizations and mortality. Elevated depression symptoms and worsening depression symptoms were found to be explanatory risk factors for adverse clinical outcomes in HF patients. Findings support the recent American Heart Association's position encouraging depression screening and to reassess symptoms of depression routinely in HF patients.
- **Relationship between depressive symptoms and long-term mortality in patients with heart failure.** *Jiang et al. 2007.* Depression was significantly and independently associated with reduced survival. Self-rated depression by BDI is independently linked with higher long-term mortality in patients with HF. Using a cutoff value of a total BDI score of 9 or  $\geq 10$  will capture most patients with HF at significantly increased risk of dying. Depression was common and was independently associated with greater long-term mortality.



# EVIDENCE

- **Recognition and Treatment of Depression and Anxiety Symptoms in Heart Failure.** *Cully et al. 2009.* Symptomatic depression and anxiety are under recognized in heart failure patients and that mental health screening may be important for the receipt of care. Notably, once depression and/or anxiety was documented in the EMR, patients were highly likely to receive mental health treatment.
- **Relationship between cognitive function, depression/anxiety and functional parameters in Pt admitted for CHF.** *Feola et al. 2013.* In-hospital CHF patients may manifest a reduction of MMSE and important anxiety/depression disorders. The results of the study suggest that the presence of cognitive impairment in older CHF patients with higher BNP plasma level should be considered. In admitted CHF patients anxiety and depression of mood are commonly reported and influenced the perception of the severity of illness.

# EVIDENCE

- **The association of depression and anxiety with medical symptom burden in patients with chronic medical illness.** *Katon et al.*
  - Patients with chronic illness and comorbid depression or anxiety, compared to people with chronic illness alone, reported significantly higher number of medical symptoms.
  - Accurate diagnosis of comorbid depressive and anxiety disorders in patients with chronic medical illness is essential in optimizing the management of symptom burden.
  
- **Effects of interventions on depression in heart failure: A systematic review.** *Woltz et al.*
  - This review does not support the development of guidelines for treatment of depression in persons with HF because evidence is insufficient and, at times, contradictory.

# EVIDENCE

- **The influence of age, gender, and race on the prevalence of depression in heart failure patients.** *Gottlieb et al. 2004.*
  - Depression is common in patients with HF, with age, gender, and race influencing its prevalence.
  - Pharmacologic or non-pharmacologic treatment of depression might improve the QOL of HF patients.
  
- **Impact of Depression on quality of life assessment in heart failure.** *Faller H et al.*
  - Inconclusive
  - Both disease severity and depression impacted each heart failure-specific HRQoL dimension
  - presence of depression seemed to distort the relationship between disease severity and HRQoL in the quality of life subscale.
  - Quality of life may depend more on the presence of depression than on the severity of CHF, assessing depression may help interpreting HRQoL scores.

# Evidence

- Factors Associated with Depressive Symptoms in Patients With Heart Failure. *Graven, et al. 2014.* Patients with heart failure symptoms also experience more depressive symptoms. These findings highlight the potential for psychological distress as HF progresses and symptoms increase. Findings in this study also suggest that individuals with a larger social network perceived a greater level of social support, suggesting that the availability of social network enhances individuals' perceptions of the afore mentioned.
- Should patients' perception of health status be integrated in the prognostic assessment of heart failure patients? A prospective study. *Di Giulio, P., 2014.* In a population of heart failure patients of any etiology, the patients perception of health status provides robust prognostic information on the medium-term mortality, on the top and independently of, the full package of other clinical and instrumental measures.

# Evidence

- Newly diagnosed heart failure: Change in quality of life, mood, and illness beliefs in the first 6 months after diagnosis. *Mulligan et al. 2012.* This study has shown that patients report significant reductions in levels of anxiety and improvements in QoL in the 6 months following the diagnosis of heart failure.
- Living with heart failure: Psychosocial resources, meaning, gratitude and well-being. *Sacco, et al. 2014.* There may be advantages to predicting how psychosocial resources may influence well-being longitudinally for both patients and their health care providers. Understanding of these relationships may potentially enhance the capabilities of health care providers to more sensitively care for heart failure patients.

# BARRIERS & STRATEGIES

## Barriers:

1. Nurse implementation of HADS scale
2. Patient participation
3. Physician ????

## Strategy to Overcome:

1. Education of importance of screening patients for depression
2. Follow through and give the patients the resources needed to follow up with positive depression scores
3. Educate physicians on depression screening and the need for further consultation and care with positive depression results.

# Expected Outcomes

- Timely and effective screening of all CHF admitted patients using HADS depression screening tool.
- Documentation in MAR regarding depression diagnosis
- Psych consults for all positive depression patients
- Follow up with patients to properly ensure depression management

# PROJECT PLANS

- - Implementation of HADS depression/anxiety scale
- - Creating easy to use sheet for nurses to screen CHF patients for depression in PCU and IPCU units
- - Will provide education to all nurses on both PCU and IPCU units in proper implementation of HADS scale and screening process.



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