The Role of Gratitude in Wellbeing in Asymptomatic Heart Failure Patients

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Introduction

• In symptomatic heart failure (HF), spirituality is associated with better mental health as well as better HF-related physical functioning.

• Gratitude is considered a positive psychological factor that has also been associated with wellbeing in some populations.

• Gratitude is part of a wider life orientation towards noticing and appreciating the positive aspects of life, and its practice offers a possible modifiable mechanism by which spirituality may exert its beneficial effects on physical and mental health.

• Few if any studies have examined whether gratitude is associated with better wellbeing in HF, or whether it is a mechanism through which spirituality may exert its benefit on health.

Purpose

• To examine associations among gratitude, spiritual wellbeing, sleep quality, depressed mood, fatigue, inflammation and self-efficacy to maintain cardiac function.

Setting & Patients

• 186 men and women with American College of Cardiology / American Heart Association Stage B asymptomatic HF (age 66.5 years ±10) were recruited from the UC San Diego and VA San Diego Healthcare System.

Assessments

• Gratitude (GQ-6)
• Spiritual wellbeing (FACIT-sp)
• Mood (BDI)
• Sleep quality (PSQI)
• Fatigue (MFSI-sf)
• Self-efficacy to maintain cardiac function (CSEQ-mf)
• Inflammatory biomarkers relevant to cardiovascular disease (CRP, TNF-alpha, IL-6, IFN-gamma & ST2)

Results

• In correlational analyses, gratitude was associated with:
  • Better sleep ($r$=-.254, $p<0.01$)
  • Less depressed mood ($r$=-0.405, $p<0.01$)
  • Less fatigue ($r$=-.455, $p<0.01$)
  • Better self-efficacy to maintain cardiac function ($r$=.406, $p<0.01$)
  • Lower levels of an inflammatory biomarker index ($r$=-.166, $p<0.05$)

• Gratitude and spiritual wellbeing are key positive factors to consider in this population. We showed that a mental attitude such as gratitude is related to better mood and sleep, more self-efficacy, and a lower cellular inflammatory index.

• Further, we attempted to untangle these relationships and found that spiritual wellbeing’s relationship with better sleep and less depressed mood is through higher trait gratitude.

• Efforts to increase gratitude in HF patients’ lives may be a treatment target for improving wellbeing and be of potential clinical value.

Conclusions

• Gratitude significantly mediated the relationship between spiritual wellbeing and mood ($z$=-4.00, SE=.08, $p<.001$). Path values are $B$ (SE). \textsuperscript{*}$p<.001$, \textsuperscript{*}$p<.05$

Figure 1. Gratitude significantly mediated the relationship between spiritual wellbeing and sleep quality ($z$=-2.35, SE=.03, $p=.02$). Path values are $B$ (SE). \textsuperscript{*}$p<.001$, \textsuperscript{*}$p<.05$

Figure 2. Gratitude significantly mediated the relationship between spiritual wellbeing and mood ($z$=-2.947, SE=.65, $p<.001$). Path values are $B$ (SE). \textsuperscript{*}$p<.001$, \textsuperscript{*}$p<.05$