Title
Poor Quality of Life Predicts Adherence to a Weight-Loss Intervention in Overweight and Obese Patients With Heart Failure

Permalink
https://escholarship.org/uc/item/7nn2713q

Journal
CIRCULATION, 128(22)

ISSN
0009-7322

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Publication Date
2013-11-26

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Peer reviewed
Abstract 18759: Poor Quality of Life Predicts Adherence to a Weight-Loss Intervention in Overweight and Obese Patients With Heart Failure

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Published: November 26, 2013

Abstract

Background: Poor quality of life (QOL) has a known association with cardiometabolic risk that is also correlated with weight, diet, physical activity, and smoking. However, the effect of QOL on adherence (i.e. completing the study protocol) to a dietary intervention in heart failure (HF) patients has not been studied. We investigated the relationship between QOL and adherence with completing a 3 month intensive weight loss intervention in a cohort of obese HF patients with metabolic complications and tested a model that included age, gender, race, baseline weight, functional status, and QOL on adherence.

Methods: Data on QOL of overweight and obese patients with HF who participated in a larger clinical trial comparing a high protein and standard protein diet were collected at baseline and 3 months using the Minnesota Living with Heart Failure (MLHF) Questionnaire. Comparisons were made between participants who completed the 3 month dietary intervention (i.e. completers) and participants who did not (i.e. non-completers).

Results: Forty-nine patients - mean age 59.1 ± 9.8; weight 248.8 ± 29.7 pounds; EF 37.3 ± 12.5%; peak VO2 12.5 ± 3.7 mg/kg/ml; 55% White; 20% Hispanics; 16% Blacks; 8% Asians - participated in the study; 34 (70%) completed the intensive phase of the dietary intervention. There were statistically significant differences in QOL
scores between completers and non-completers (Table 1). There were no age or gender differences between completers and non-completers; Whites were less likely to complete the intervention compared to their counterparts (p = 0.046). In a model controlling for age, gender, race, baseline weight, and functional status, QOL explained an additional 19% of the variance in adherence.

**Conclusion:** Our findings elucidate the need to integrate QOL assessments and strategies in clinical trials involving dietary interventions as potential key to enhancing adherence.

**Table 1:** Quality of Life Scores of Completers and Non-Completers at Baseline and Three Months

<table>
<thead>
<tr>
<th></th>
<th>Completers (n=34) Mean ± SD</th>
<th>Non-Completers (n=15) Mean ± SD</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall QOL</td>
<td>40.80 ± 20.33</td>
<td>58.74 ± 24.20</td>
<td>0.010</td>
</tr>
<tr>
<td>Physical QOL</td>
<td>16.42 ± 9.28</td>
<td>24.69 ± 10.39</td>
<td>0.008</td>
</tr>
<tr>
<td>Emotional QOL</td>
<td>9.13 ± 7.04</td>
<td>14.50 ± 7.50</td>
<td>0.020</td>
</tr>
</tbody>
</table>

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Heart failure  Behavior change  Adherence  Quality of life  Nutrition