The Impact of Marital Status on Adverse Psychological Effects in Patients Undergoing Treatment for Chronic Hepatitis C (HCV)

Lauren Rover¹, Jillian K. Price¹,², Carey Escheik², Anthony Loria², Lynn Gerber¹,², Zobair M. Younossi²

1. Department of Rehabilitation Science, College of Health and Human Services, George Mason University, Fairfax, VA, USA.
2. Betty and Guy Beatty Center for Integrated Research, Inova Health System, Falls Church, VA, USA.

Disclosure Information: Nothing to disclose.

Background

- Interferon based therapies, the current standard of care for treatment of chronic hepatitis C (HCV), are linked to numerous psychological side effects; namely anger and depressive symptoms
- Married individuals have been shown to better cope with chronic illness and display better mental health outcomes than their unmarried counterparts, believed to be due in part to increased social support.

Aim

To examine the associations between marital status and changes in anger and depressive symptoms in patients with HCV undergoing interferon and ribavirin therapy.

Methods

- Patients with HCV undergoing treatment with pegylated interferon alpha-2b and ribavirin completed the following questionnaires:
  - The Center for Epidemiologic Studies Depression Scale (CES-D) at baseline and treatment weeks 1, 2, 4, 8, 12, 16, 20, and 24.
  - The State-Trait Anger Expression Inventory-2 (STAXI-2) at baseline and treatment weeks 4, 12, and 24.
- Medication records were reviewed to determine antidepressant use at each time point.
- Descriptive statistics and Mann-Whitney U tests were performed.
- Statistics performed on SPSS version 12.1.0.
- p < 0.10 was considered trending to significance.

Results

- Fifty four subjects completed surveys at all specified timepoints [Table 1].

Table 1. Patient Demographics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean/Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender Male</td>
<td>61.1%</td>
</tr>
<tr>
<td>Age</td>
<td>49.5 ± 7.1</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>75.9%</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>64.8%</td>
</tr>
<tr>
<td>African American</td>
<td>13.0%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>1.9%</td>
</tr>
<tr>
<td>Asian</td>
<td>20.4%</td>
</tr>
<tr>
<td>BMI &gt;30</td>
<td>24.1%</td>
</tr>
<tr>
<td>History of Depression</td>
<td>27.6%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>13.0%</td>
</tr>
<tr>
<td>Hypertension</td>
<td>19.0%</td>
</tr>
</tbody>
</table>

- During the first four weeks of treatment, average CES-D score was consistently higher for unmarried individuals [Figure 1].
- In treatment weeks 8-24, average CES-D scores decreased for both groups, but at no time point did the difference between groups reach statistical significance [Figure 1].
- Both groups experienced an increase in total angry feelings during treatment.
- Unmarried individuals scored higher on:
  - Suppression of anger scale [Table 2, Figure 2].
  - Feeling like expressing anger physically scale [Table 3, Figure 3].
- Antidepressant use increased over the course of treatment in both groups and was found to correlate with higher CES-D scores.

Conclusions

- Married and unmarried individuals experienced increased angry feelings throughout treatment and an increase in depressive symptoms during weeks 0-4 of treatment.
- Married and unmarried patients had clinically relevant differences in both the nature of the anger they experienced and the manner in which they coped with the anger. Unmarried individuals were more likely to:
  - Have angry feelings that were physical in nature
  - Suppress their anger
- Initially, unmarried individuals scored higher for depressive symptoms, which is consistent with the literature
- Beyond week four, this trend did not hold and there were no statistically significant differences between the two groups
- Because antidepressant use was determined to correlate with higher CES-D scores, it does not explain the trends observed in the later weeks of treatment.