A Pilot Study of a Manualized Resilience-Based Telehealth Program for Support Partners of Persons with Multiple Sclerosis

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INTRODUCTION
• Cognitive impairments are a prominent and well-recognized symptom of Multiple Sclerosis (MS), yet the impact on persons with MS and their families is not well understood.
• In a previous study, we interviewed 15 individuals with MS and their spouses about how cognitive impairments impact their daily lives. We found that:
  1. Cognitive impairments impact both the person with MS and their support partner by affecting their health-related quality of life, communication, relationship quality, and daily activities. However, there are ways to help buffer this impact by promoting resilience and coping strategies.
  2. The support partner plays a major role in helping the person with MS adjust to cognitive impairments.
  3. Participants expressed a desire for more support, such as, to learn more about successful strategies to overcome regularly occurring challenges in communication and in activities of daily living.
• Based on these findings, we designed a tele-health resilience-building intervention for individuals with MS and their support partners.

OBJECTIVES
• The primary objective was to conduct an evaluation of the feasibility of the resilience program by examining participant recruitment, willingness to participate, and satisfaction in the program.
• Secondary objectives were to assess the potential long-term benefits of the program including increased perception of emotional support (from the participants with MS), resilience, stress and positive and negative emotions.

METHODS
• 62 participants in the US were recruited to participate in a six session interactive online resilience-related skills program led by a coach.
• Support partners participated in all six sessions and their partner with MS participated in sessions 1 and 6 only.
• Each pair completed baseline, post-coaching and 3 month follow up measures relating to the secondary objectives and had access to materials through a personalized website.
• Out of the 31 pairs, 26 were spouses, 2 were cohabiting partners, and three were parent-child dyads. 27 pairs were White or Caucasian, 2 African-American, 1 Hispanic, and 1 inter racial.
• This study was registered on ClinicalTrials.gov (NCT03555253) and was approved by the Advarra Institutional Review Board.

RESULTS
Feasibility:
• Completion rate was 83.8% (26/31), with four pairs withdrawing from the study for scheduling conflicts (e.g. family bereavement or medical related issues). Satisfaction of the intervention was considered good and some example quotes are provided.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Pre</th>
<th>Post</th>
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<tbody>
<tr>
<td>Modified Social Support Scale5</td>
<td>26 72.6</td>
<td>2.34 76.9</td>
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<tr>
<td>Emotional Support Subscale4</td>
<td>26 31.00</td>
<td>1.16 33.7</td>
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<tr>
<td>Satisfaction with Care Subscale3</td>
<td>26 45.6</td>
<td>1.41 45.6</td>
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<tr>
<td>Perceived Stress Scale4</td>
<td>26 36.23</td>
<td>1.38 33.61</td>
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<tr>
<td>Knowledge</td>
<td>52</td>
<td>15.26</td>
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<tr>
<td>General Life Satisfaction5</td>
<td>52</td>
<td>25.61</td>
</tr>
<tr>
<td>Resilience6</td>
<td>52</td>
<td>29.32</td>
</tr>
</tbody>
</table>

Preliminary Efficacy:
• t-tests for pre and post intervention were conducted to establish preliminary efficacy of the intervention. Participants with MS reported better overall support along with, in particular, increased feelings of emotional support. Support partners reported higher satisfaction of their care provided to their partner with MS as rated by a subscale in the Sense of Competence questionnaire, and lower levels of stress.
• Overall, participants described increased knowledge, increased general life satisfaction, and increased resilience. Knowledge was measured using a self constructed questionnaire by the study team to measure knowledge on cognition and resilience. Further analysis will be conducted.

CONCLUSIONS
The overall study feasibility is considered successful to date with a range of participant ages in both spousal and non-spousal pairs. The study to date shows the benefits of resilience building skills in addressing challenges previously identified in this population. These skills can be promoted and taught clinically via non-therapeutic methods supported by telehealth. Future development of the program includes further personalized modules or group participation.

If you’d like to learn more, visit https://www.myhealios.com/research or get in touch via info@myhealios.com.

We would like to thank the wider study team for their participation in conducting the pilot and the participants of the study for their time.

This study was funded by a grant from Genentech Inc.

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