Exercise for Life (EX4L): An Online Resource for Individuals with Spinal Cord Injuries

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Facility & Target Population

Gaylord provided care for 480 individuals with spinal cord injuries (SCI) in 2019. After an initial stay in acute rehab for an average of 11 days, almost 90% of individuals with SCI are discharged to their private homes. This yields a challenge to individuals who now might be dependent on caretakers for support and are unable to leave their homes which can place them at risk of developing poor fitness habits. On top of this, the COVID-19 pandemic has limited access to various exercise locations. In order to maintain a high level of physical activity, EX4L was designed to provide individuals with SCI creative and innovative educational exercise videos they can perform safely and within the comfort of their own homes.

Description of Health Behavior

The needs assessment consisted of a 17-question survey which was distributed to individuals with SCI at Gaylord and within the surrounding area (n = 12). The survey focused on previous level of physical activity, access to exercise equipment within their home, and exercise preferences. A focus group (n = 3) was conducted to get a better understanding of the program user’s opinions about an online exercise platform and their individual preferences within the site. Both forms of data collection gave significant information which guided the program development within an online platform. Figure 1 depicts the results of a survey question highlighting the benefit of online exercise videos.

Figure 1: Benefit of online exercise resources

<table>
<thead>
<tr>
<th>Health Behavior Analysis</th>
<th>Predisposing</th>
<th>Enabling</th>
<th>Reinforcing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of lesion</td>
<td>Level of knowledge of fitness</td>
<td>Computer access</td>
<td>The belief exercise has positive benefits</td>
</tr>
<tr>
<td>Motivation</td>
<td>Motivation level</td>
<td>Social support (family, friends, etc.)</td>
<td>Past experience with physical therapy</td>
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<tr>
<td>Belief that it’s unsafe to go outside during COVID-19 crisis</td>
<td>Exercise equipment available at home</td>
<td>Social recognition with level of independence from exercising</td>
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Program Description

Mission:
Provide an innovative, educational, and lifestyle changing at-home exercise program for individuals with SCI.

Vision:
Improve the lives of individuals with spinal cord injury from the comfort of their own homes.

Social Cognitive Theory

Environmental Barriers
- COVID safety precautions
- Limited social support at home
- Difficulty with transportation
- Limited resources to be educated on how to stay safe and exercise at home
- Limited equipment at home to complete exercises

Environmental Reinforcers
- Support groups
- Access to a computer

Taking these factors into consideration, we determined that having an online resource could produce a positive behavioral change in those with SCI to stay physically active and be educated about how to be safe while working out at home. The website includes a social networking forum where participants can share their workouts with others, participate in challenges, and track their progress.

Website Features

- Social Networking Forum
  - Members can share their exercise ideas & participate in challenges
- Exercises/ Workouts
  - Organized by body region & fitness level
- Feedback
  - Reviewed monthly
- Cardio & Mobility
  - Guidelines, benefits, examples & precautions

Training Tools

EX4L

- Additional resources to be successful!

Program Evaluation

On July 7th, 2020 program participants were provided access to the website.

Survey #1
- Surveys were sent to participants (n = 4) and Gaylord therapists (n = 4) three weeks after the release of the website. Questions in the survey targeted the program’s outcome and impact objectives.

Survey #2 Results:
- 100% of the participants agreed that they felt comfortable navigating through the EX4L website after viewing the educational webinar.
- 100% of the participants agreed that EX4L online has helped alleviate some of the barriers the COVID pandemic has created.
- 100% of the participants reported an increase in exercise intensity and variety when using the website.
- 100% of participants strongly agree that they would recommend EX4L to a friend.

Acknowledgements

Kimberly Levesque, PT, DPT, Donna Bowers, PT, DPT, MPH, Gaylord Physical Therapy Orthopedics and Sports Medicine, and the program users who continue to provide feedback.

References


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