

## PURPOSE

Due to a lack of lifestyle and behavioral therapy for patients with fibromyalgia, a 10-week, private-pay, Lifestyle Redesign® Fibromyalgia treatment group was developed at the USC Occupational Therapy Faculty Practice. This poster presents the preliminary clinical outcomes of the group to demonstrate the significant role occupational therapists (OTs) can play in Fibromyalgia care.

## BACKGROUND

Fibromyalgia affects more than 5 million Americans and impacts a person's ability to engage in activities of daily living and work, their quality of life, and leads to increased time and money spent on accessing healthcare services.<sup>1</sup> It is characterized by:

- Chronic diffuse musculoskeletal pain
- Fatigue
- Sleep disorders
- Depression<sup>2</sup>

Treatment for this diagnosis includes both pharmacological and nonpharmacological therapies with the goal of increasing function, both physically and cognitively, and to learn strategies for effective management of symptoms.<sup>3</sup> OTs are qualified providers to treat patients with fibromyalgia, yet there is a lack of research available demonstrating OT involvement and effectiveness in treating people with fibromyalgia. OTs help people manage pain by:

- Identifying activities or behaviors that aggravate pain
- Teaching methods to limit the frequency or duration of painful episodes
- Training and implementing health-promoting coping strategies to manage stress and depression
- Facilitate increased engagement and independence for ADLs at home, work or in the community

## METHODS

To increase the available non-pharmacological treatment options and increase social support for patients with fibromyalgia, a 10-week occupational therapy treatment group was developed by a licensed occupational therapist. The process of program development is demonstrated in Figure 1.

To assess the effectiveness of lifestyle-based occupational therapy for management of fibromyalgia, a retrospective study collected and assessed outcome data of patients who entered the outpatient OT treatment group as part of their usual plan of care. An occupational therapist administered the treatment group using a Lifestyle Redesign® approach. Lifestyle Redesign® is an evidence-based lifestyle and behavioral intervention that promotes the development of health-promoting habits and routines for improved chronic condition management.<sup>4</sup>

Patients were referred by community rheumatologists and participated in group sessions for one hour each week for 10 weeks. Session topics are listed in Figure 2. Patients completed outcome measures at week 1 and week 10. Each of these outcome measures, listed in Figure 3, demonstrate valid and reliable testing.<sup>5-9</sup> In addition to outcome measures that assess general health and pain interference (i.e., RAND-SF 36, Brief Pain Inventory, Pain Self-Efficacy Questionnaire), the Fibromyalgia Impact Questionnaire (FIQ) and the Beck Depression Inventory (BDI) are commonly used to assess patients with fibromyalgia, and therefore were included as outcome measures in this group program.

T-tests were used for each outcome measure to assess if there was a significant difference in score from the start to the end of the group program. Additionally, the average percentage change in scores from week 1 to week 10 was calculated for each outcome measure. Outcome data was excluded from the analysis if the data was incomplete either at the initial evaluation or both. Only completed measures at initial evaluation and discharge were included.

## WITH APPRECIATION

Thanks to the clinicians and staff at the USC Occupational Therapy Faculty Practice and USC/community rheumatologists for entrusting us with the care of their patients.

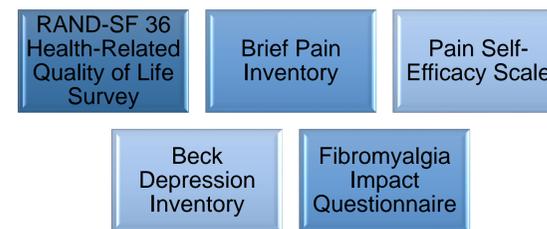
Figure 1: Process of Program Development



Figure 2: Lifestyle Redesign® Fibromyalgia Group Modules

- Week 1: Introduction and Goal-Setting
- Week 2: Fatigue Management and Energy Conservation
- Week 3: Sleep Hygiene
- Week 4: Eating and Exercise Routines
- Week 5: Stress Management
- Week 6: Depression Management
- Week 7: Ergonomics, Body Mechanics and Joint Protection
- Week 8: Cognitive Strategies
- Week 9: Time management and Lifestyle Balance
- Week 10: Wrap Up and Long-Term Goal-Setting

Figure 3: Outcome Measures



## DISCUSSION

### Challenges and Limitations

- Small sample size
- Inconsistent participant attendance due to pain flares, fatigue, and transportation limitations
- Financial constraints
- Incomplete or missing outcome data

### Implications and Next Steps

- OTs can provide treatment for patients with fibromyalgia to address lifestyle modification and self-management strategies in order to improve physical function, energy management, pain self-efficacy and depressive symptoms.
- Continue to administer treatment group, collect outcome data, and update module content to demonstrate clinical effectiveness of OT services.

## RESULTS

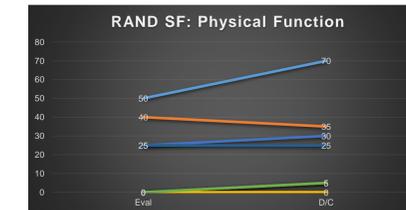
The group was administered by a licensed OT a total of 3 rounds between January 2015 and April 2016. Demographic data is summarized in Figure 4. Outcome measures were completed at week1 and week 10.

Figure 4: Demographics

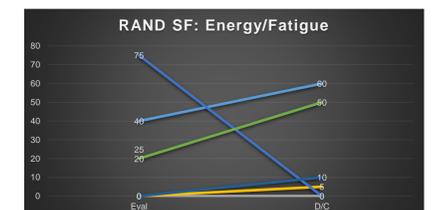
<b>Total # of participants</b>	<b>7</b>
Mean Age	49
Female	6 85%
Male	1 15%
Average number of sessions:	8.4

The t-tests did not reveal clinical significance for any of the outcome data due to the small sample size of participants. However, comparison of the average percentage change in scores from the initial evaluation to discharge indicate a positive effect of OT treatment on physical function, energy and fatigue management, pain self-efficacy, and depression. These results are highlighted in Figures 5-8.

Figures 5-8: Outcome Measure Results



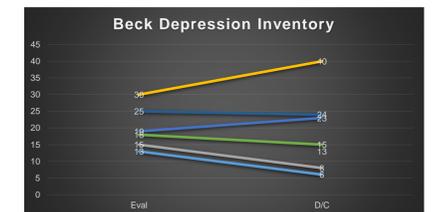
**Average Percentage Change:** 32.9%  
**Clinical Implications:** Higher scores indicate improved physical function.



**Average Percentage Change:** 32.2%  
**Clinical Implications:** Higher scores indicate improvements in energy and fatigue.



**Average Percentage Change:** 21.5%  
**Clinical Implications:** Higher scores indicate improved confidence with ability to perform activities despite pain.



**Average Percentage Change:** 11.1%  
**Clinical Implications:** Lower scores indicate decreased presence and severity of depressive symptoms.

## REFERENCES

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