



# Mindfulness-Based Meditation for Individuals with Multiple Sclerosis in the Multiple Sclerosis Clinic

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## BACKGROUND

- Multiple sclerosis (MS) is an autoimmune disease of the central nervous system which has an impact on the client's physical, cognitive, functional and emotional status, including his/her quality of life<sup>1</sup>.
- Pain (physical, emotional), limb weakness, fatigue, sensory changes and symptoms of depression and anxiety are commonly reported<sup>1</sup>.

### What is Mindfulness?

- Mindfulness is the awareness that arises when we pay attention, non-judgmentally, to what is happening in the present moment<sup>2</sup>.
- Mindfulness meditation has been used in a variety of treatments (i.e. for coping with chronic pain, fibromyalgia, heart disease, cancer, depression and anxiety)<sup>3</sup>.
- Mindfulness training for individuals with MS have been shown to:
  - Enhance quality of life<sup>1</sup>.
  - Alleviate symptoms of depression, anxiety, and fatigue.
  - Improve physical balance<sup>4</sup>.

## OBJECTIVE

To determine the impact of a Mindfulness-Based Meditation group for clients with MS at the St. Michael's Hospital (SMH) in Toronto, Canada who have reported pain (chronic, neuropathic, emotional), fatigue, stress and symptoms of depression and anxiety.

## METHODS

### Participants

- 24 clients (11 from the first cycle and 13 from the second cycle) with MS from SMH participated using a convenience sampling technique.
- Clients who failed to complete the post-questionnaires and/or those who completed less than four classes were excluded, resulting in 13 clients.

### Demographic characteristics of the participants (n=13)

Characteristics	Years
Age	41.85 (26-56)
Years post-diagnosis of MS	9.62 (1-31)

## METHODS Cont'd

### Demographic characteristics of the participants (n=13)

Characteristics	Patients (n)
<b>Type of MS</b>	
Relapsing remitting (RR)	8
Primary Progressive (PP)	3
Secondary Progressive (SP)	2
Progressive Relapsing (PR)	0
<b>Gender</b>	
Male: Female	4:9
<b>Education</b>	
High School	1
Some College	3
Completed College/University	6
Post Graduate Studies	3
<b>Occupation</b>	
Full time	5
Part time	2
Homemaker	2
Retired	0
Other	4
<b>Meditation Experience Before</b>	
Yes: No	8:5

### Description of the Mindfulness-Based Meditation Program

- Two 11-week programs were implemented between Apr-June and Sept-Nov, 2014.
- Participants met once a week for 2 hr 15 min.
- Utilized the Mindfulness-Based Chronic Pain Management (MBCPM) curriculum developed by Dr. Jackie Gardner-Nix, a staff physician at the SMH.
- Course covered various meditation topics (i.e. judging, beginner's mind) along with multiple types of meditations.
- Participants were supplied with CDs of selected meditations for class and daily home use.
- Facilitated by an Occupational Therapist who is trained in MBCPM.

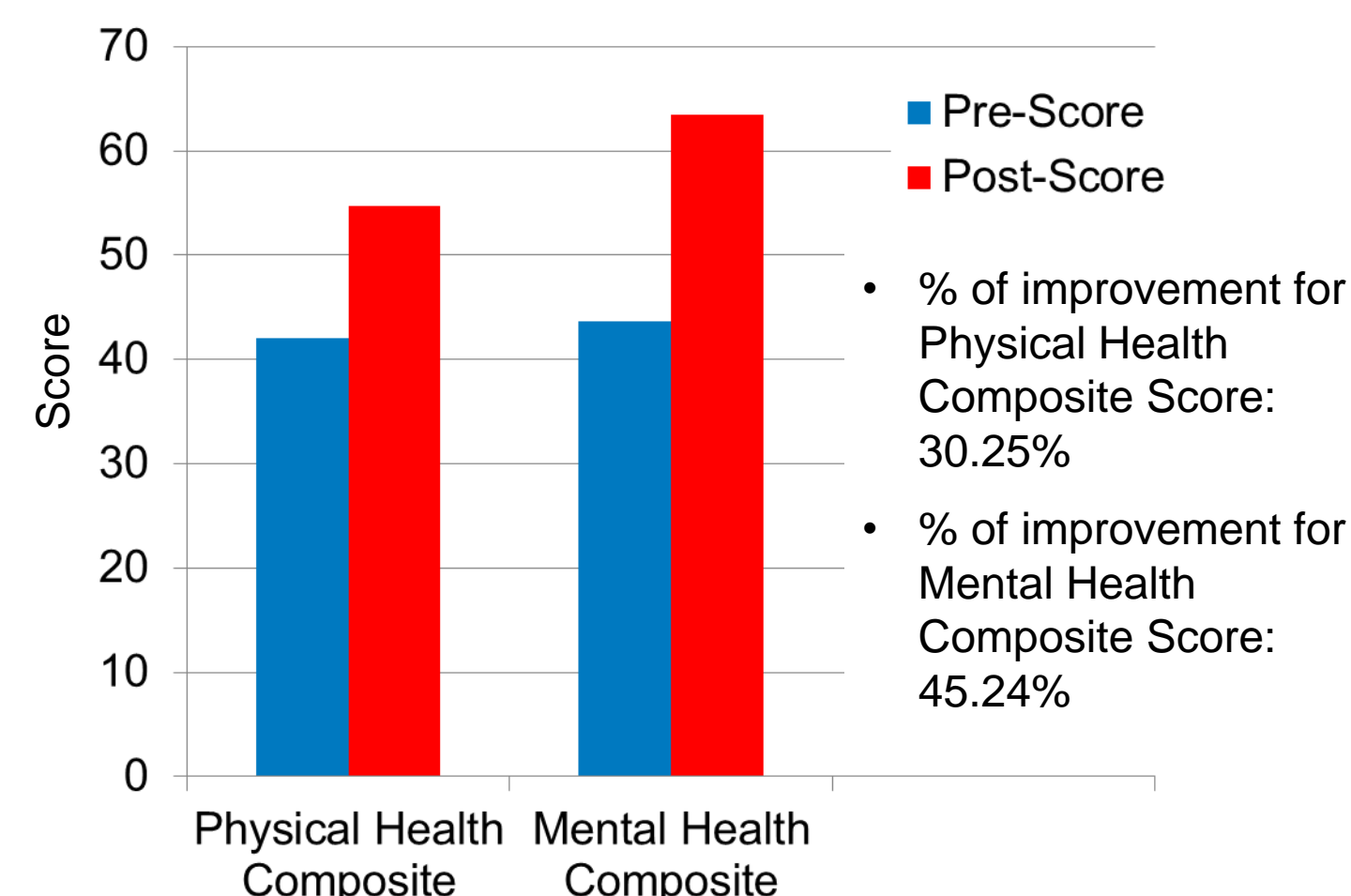
### Data Collection

- Demographic questionnaire was collected at baseline.
- MS Quality Of Life (MSQOL) - 54 Instrument and Pain Catastrophizing Scale (PCS) were collected at the beginning and on completion of the program.

## RESULTS

### MS Quality Of Life - 54 Scores (MSQOL-54)

- MSQOL-54 includes 2 summary scores (physical health composite summary and the mental health composite summary).
- Max score is 100, with higher values indicating better QOL.



### Participants' Feedback



## RESULTS

### Pain Catastrophizing Scale (PCS)

- PCS is a 13-item one page survey. Max score is 52.

PCS	Pre-Score	Post-Score
Mean average	20.92	12.62
Median	20	9

- % of improvement: 40.0%

## NEXT STEPS

- Consider the impact of other factors (i.e. types of MS, degree of disability) on the effectiveness of group.
- Consider the evaluation of outcomes from a larger group to reduce bias.
- Provide opportunities for alumni to maintain/further develop their mindfulness practice/skills
- Use telemedicine for participants who live in other areas.
- Include family members in the program.

## CONCLUSION

- The Mindfulness-Based Meditation group for clients with MS at SMH, led by an Occupational Therapist, appears to result in a reduction in individuals' perceived pain score and an increased in quality of life.
- Mindfulness-Based Meditation group intervention can potentially serve as an adjunct to conventional treatment for clients with MS.

## ACKNOWLEDGEMENT

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