Mindfulness for Neurological Conditions

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Mindfulness & wellbeing

- Physical and mental relaxation
- Psychological well-being
- Fatigue
- Anxiety

Jevning et al., 1992; Young and Taylor, 2001; Rosenzweig et al., 2003; Tang et al., 2007; Cahn & Polich, 2006
Mindfulness & cognition

- Focused attention
- Interoceptive attention
- Emotional processing
- External attention

Valentine & Sweet, 1999; Farb et al., 2013; Sauseney et al., 2007; McEvoy et al., 2000;
Mindfulness & chronic conditions

- ↓ distress
- ↓ pain, fatigue
- ↑ QoL

Grossman et al., 2004; Merkes, 2010
Multiple Sclerosis (MS)

Central nervous system (brain and spinal cord)

In multiple sclerosis the myelin sheath, which is a single cell whose membrane wraps around the axon, is destroyed with inflammation and scarring.
Mindfulness & MS

Controlled study with people with MS & peripheral neuropathy (n=17) (Tavee et al., 2000):

↓ pain

↓ fatigue

Pilot RCT with people with SP MS (n=16) (Mills & Allen, 2000):

↑ symptom management

↑ balance
Mindfulness & MS

RCT (n= 150) (Grossman et al., 2010):

↑ MS QoL

↓ depression

↓ fatigue

Control trial (n=32) (Burschka et al., 2014)

↑ balance

↑ coordination

↓ depression
What is MIMS?
"Hollywood" therapy eases agony of MS: Mindfulness could be key to reducing pain and depression for those with debilitating disease

- Mindfulness encourages people to focus attention on the present moment
- Researchers hail it as a cost-effective way to keep MS symptoms at bay
- These include pain, fatigue and problems with speech and swallowing
- Mindfulness has built up an avid following in recent years, including actresses Emma Watson and Goldie Hawn

By HILARY FREEMAN FOR THE MAIL ON SUNDAY

It's the meditation method beloved of Hollywood stars, big business and politicians. Now mindfulness could hold the key to reducing pain and depression in people suffering from the debilitating disease multiple sclerosis.

Based on ancient Eastern methods of meditation, mindfulness is said to ease the stresses and strains of everyday life by encouraging people to pay more attention to the present moment.

Researchers have hailed it as a cost-effective and side-effect-free way to keep at bay the symptoms of progressive MS, which include pain, fatigue and problems with speech and swallowing, and for which there is currently no cure.
What is MIMS?

- Weekly sessions
- 20min daily practice
- 8 weeks
- Skype
Randomised (n=40)

Allocated to mindfulness (n=19)
- Lost post-course follow-up (n=2)
- Lost 3-month follow-up (n=2)
  - Analysed (n=19)

Allocated to waiting-list (n=21)
- Lost post-course follow-up (n=2)
- Lost 3-month follow-up (n=1)
  - Analysed (n=21)
## Participants

<table>
<thead>
<tr>
<th></th>
<th>MIMS (n=19)</th>
<th>Control (n=21)</th>
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<tbody>
<tr>
<td>Age (M, SD)</td>
<td>53.42 (8.3)</td>
<td>50.9 (9.9)</td>
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<tr>
<td>Women (N, %)</td>
<td>10 (52.6)</td>
<td>13 (61.9)</td>
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<tr>
<td>University (N, %)</td>
<td>8 (42.1)</td>
<td>11 (52.4)</td>
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<td>White British (N, %)</td>
<td>17 (89.5)</td>
<td>19 (90.5)</td>
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<tr>
<td>Married (N, %)</td>
<td>15 (78.9)</td>
<td>16 (76.2)</td>
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MIMS attendance

- N=18 (94.7%) attended ≥4 sessions
- N=14 (73.7%) attended ≥6 sessions
- N=7 (36.9%) attended ≥7 sessions
### Results

<table>
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<tr>
<th>Outcome measure</th>
<th>Effects-post course</th>
<th>Effects- 3 months follow-up</th>
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<tr>
<td>Distress (GHQ)</td>
<td>-0.65*</td>
<td>-0.94**</td>
</tr>
<tr>
<td>Anxiety (HADS)</td>
<td>-0.40</td>
<td>-0.86*</td>
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<tr>
<td>Depression (HADS)</td>
<td>-0.65*</td>
<td>-0.53*</td>
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<tr>
<td>Psychological Impact of MS (MSIS)</td>
<td>-0.99***</td>
<td>-1.12***</td>
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*p<0.05, **p<0.01, ***p<0.001
Feedback interviews

- 15 participants (8 women)
- Semi-structure telephone interviews
- Thematic analysis
Results: interviews

- Group value
- Self-compassion
- Acceptance
- Skype: acceptable
Mindfulness & Parkinson’s
Mindfulness & Parkinson’s’s

- Mindfulness intervention = enjoyable and helpful (Fitzpatrick et al., 2010).

- Gray Matter Density in the right amygdala, and bilaterally in the hippocampus (Pickut et al., 2013).

- Motor symptoms, pain & mindfulness (Pickut et al., 2015).
The future

Mindfulness for carers

Large trails for mindfulness in MS & PD
Acknowledgements

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Ms Amy Martin

Dr John Hindle
Dr Catherine Hurt

PARKINSON’S UK
CHANGE ATTITUDES.
FIND A CURE.
JOIN US.

Multiple Sclerosis Society
Thank you for listening!