Mindfulness and early year medical students

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Introduction

Previous research suggesting 1 in 4 Medical students ‘burned-out’. (Cecil et al., 2014)

High proportion of first and second years reported as high-risk for developing burnout.

Mindfulness?
Procedure

5 week, 1 hour Thursday evening sessions
Consultation Skills Learning Centre
Mindfulness based CBT – expert deliver
Open to all first/second year students
Funded by CHERIL
Mixed Methods Evaluation

Questionnaires pre and post mindfulness training:
- Maslach Burnout Inventory – Student Survey (MBI-SS)
- Warwick Edinburgh Mental Wellbeing
- Generalised Self-efficacy
  - Wilcoxon Signed Rank Tests

Focus group (n=7)
- 2 months after mindfulness course
  - Framework analysis; 3 males, 4 females, (3 from year 1, 4 from year 2)
Sample

37 participants attended the course
33 participants (5% recruitment rate) completed baseline
22 participants completed follow up
14 male, 19 female; 15 in year 1, 18 in year 2
Mean age - 21.50 SD 4.08 (range 18-35)
<table>
<thead>
<tr>
<th></th>
<th>All students in year 1&amp;2 (n = 726)</th>
<th>All participants (n = 33)</th>
<th>Baseline only sample (n = 11)</th>
<th>Time 2 Sample (n = 22)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
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</tr>
<tr>
<td>Male</td>
<td>48.4% (351)</td>
<td>42.4% (14)</td>
<td>45.5% (5)</td>
<td>41% (9)</td>
</tr>
<tr>
<td>Female</td>
<td>51.6% (375)</td>
<td>57.6% (19)</td>
<td>54.5% (6)</td>
<td>59% (13)</td>
</tr>
<tr>
<td><strong>Age group</strong></td>
<td></td>
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<tr>
<td>18 - 23</td>
<td>94.2 (684)</td>
<td>81.8 (27)</td>
<td>90.9 (10)</td>
<td>77.3 (17)</td>
</tr>
<tr>
<td>24 - 29</td>
<td>5.1 (37)</td>
<td>18.2 (6)</td>
<td>9.1 (1)</td>
<td>22.7 (5)</td>
</tr>
<tr>
<td>&gt;30</td>
<td>0.7 (5)</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
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<tr>
<td>White British</td>
<td>58.8 (427)</td>
<td>White 60.6 (20)</td>
<td>63.6 (7)</td>
<td>60 (13)</td>
</tr>
<tr>
<td>White other</td>
<td>21.2 (7)</td>
<td>36.4 (4)</td>
<td>13.6 (3)</td>
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</tr>
<tr>
<td>Asian Indian</td>
<td>31.8 (231) Asian</td>
<td>3.0 (1)</td>
<td>0</td>
<td>4.5 (1)</td>
</tr>
<tr>
<td>Asian Pakistani</td>
<td>3.0 (1)</td>
<td>0</td>
<td>4.5 (1)</td>
<td></td>
</tr>
<tr>
<td>Asian other</td>
<td>3.0 (1)</td>
<td>0</td>
<td>4.5 (1)</td>
<td></td>
</tr>
<tr>
<td>Mixed white and black African</td>
<td>2.6 (19) Black</td>
<td>3.0 (1)</td>
<td>0</td>
<td>4.5 (1)</td>
</tr>
<tr>
<td>Mixed white and Asian</td>
<td>3.0 (1)</td>
<td>0</td>
<td>4.5 (1)</td>
<td></td>
</tr>
<tr>
<td>Mixed other</td>
<td>6.2 (45) – other</td>
<td>3.0 (1)</td>
<td>0</td>
<td>4.5 (1)</td>
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<tr>
<td>No answer</td>
<td>0.6 (2)</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td><strong>Year of study</strong></td>
<td></td>
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<tr>
<td>First</td>
<td>51.7 (375)</td>
<td>45.5 (15)</td>
<td>54.5 (6)</td>
<td>41 (9)</td>
</tr>
<tr>
<td>Second</td>
<td>47.8 (347)</td>
<td>54.5 (18)</td>
<td>45.5 (5)</td>
<td>59 (13)</td>
</tr>
</tbody>
</table>
Results – Maslach burnout inventory, SS

Pre Mindfulness:
- 76% reported high levels of emotional exhaustion
- 52% reported high levels of cynicism
- 30% reported low levels of professional efficacy.
- 13% met the criteria to be considered ‘burnt out’

Post Mindfulness:
- 61% reported high levels of emotional exhaustion ($p = .002$, medium effect size $r = 0.32$)
- 39% reported high levels of cynicism ($p = .036$, small effect size $r = 0.22$)
- 20% reported low levels of professional efficacy ($p = 0.238$)
- 9% met the criteria to be considered ‘burnt out’
Results

**Well-being:** Post Mindfulness significantly increased \( (p = < .001) \), with a medium effect size \( (r = 0.45) \).

**Self-efficacy:** Post Mindfulness significantly increased \( (p = < .001) \), with a medium effect size \( (r = 0.42) \).
Themes

Awareness of thoughts on behaviour

(Un)Acceptance of stress
Awareness of thoughts on behaviour: Acknowledging pressure

‘If I let myself slip up for one minute then I fall down, I forget things’ (Male A, 1\textsuperscript{st} year)

‘I was just being busy and I was busying myself’ (Female B, 2\textsuperscript{nd} year)

‘Look after yourself so that you can be a good doctor not look after yourself so that you can be a be a good human, who is a doctor’ (Female B, 2\textsuperscript{nd} year)
Awareness of thoughts on behaviour: Awareness

‘Forcing me to ask myself how I was feeling that day and if I was particularly preoccupied or just feeling really annoyed, it was the first time I’d actually addressed that … I hadn’t thought about myself in quite a long time’ (Female A, 2nd year)

‘I’m only starting to notice that now that what you think is not actually what it is’ (Female, 1st year)
Awareness of thoughts on behaviour: Changing behaviours

‘Realising I don’t have to always be regurgitating facts in my head over and over and over again and I can say yeah I’ll probably remember them in an hour in a week in a month and that’s okay … and have that confidence in yourself’ (Male A, 1st year)

‘I’m not doing any more or less work but I’m more available mentally to do it and to kind of absorb it better I think’ (Female B, 2nd year)
(Un)acceptance of stress

‘[being stressed] doesn’t seem to be very well tolerated or looked upon’
(Female, 1st year)

‘They [the medical school] do like tell it tell like the importance of having a work life balance they don’t really give you any ways of doing it’ (Female C, 2nd year)

‘..accessing welfare ..something will come up and then they’ll be kind of questioned about whether they’re fit to to be in the course’ (Female b, 2nd year)
Acceptance of stress

‘you know a quiet place where you come and it is explicitly acknowledged that things are sometimes stressful’ (Male B, 1st year)

‘Quite an exciting sort of idea that we could kinda come together and people could kinda admit these things without kinda shameful stigmatisation or kinda feeling any kinda negative connotations’ (Female, 2nd year)
**Feeling ‘OK’**

‘Like well I’m okay I, that, that’s it, it’s not I don’t I’m not fantastic I’m not ridiculously happy I Don’t suddenly know everything that I need to know but I’m okay, and that was really important to me’ (Female B, 2\textsuperscript{nd} year)

‘Life’s always gonna be very crappy but we’ve kind of been given a way of handling it or a means to cope with anything better’ (Male A, 1\textsuperscript{st} year)
Conclusion

At follow up; burnout significantly decreased, wellbeing and self efficacy significantly increased

Skills of mindfulness were assimilated

Burnout in the early year students exists

→ Based on a small, self selected sample.
Where do we go from here?

Comparison with other interventions – talking groups / yoga
Curriculum changes / mindfulness availability
Measures of mindful behaviours in medical students
Control arm
Thank you for listening.

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