NHSGGC Mindfulness Based Stress Reduction Programme

Introduction

In response to a UK Parliament report’s¹ recommendation to improve the wellbeing of the Public Sector workforce, a Mindfulness programme was introduced for NHSGGC staff in 2015 as a pilot. The pilot developed and delivered Mindfulness Based Stress Reduction (MBSR) courses and taster sessions and began to develop a network of tutors, a mix of in-house and external experts. A 2016 external evaluation² found the approach had been successful in reducing stress level of participants, and thereafter support was given from NHSGGC General Endowments to deliver MBSR for two further years. Evaluation data from 2017-2019 finds that the programme continues to show a reduction in stress for those employees that attend MBSR courses.

Background

The NHSGGC Mindfulness programme has been delivered by the Public Health Directorate’s Health Improvement Team with specialist support from Mindfulness Scotland and Community Mental Health, and has been promoted under the banner of the Staff Health Strategy.

Mindfulness has been defined by MBSR pioneer Jon Kabat-Zinn as:
“The awareness that arises from paying attention, on purpose, in the present moment and non-judgmentally” (Kabat-Zinn, in Purser, 2015).

The MBSR approach consists of taster sessions and 8-week long courses. Typically, 5 courses and 10 tasters are delivered and promoted in the same ‘tranche’, provided in different locations across the Health Board. Approximately two tranches are delivered per year. Recruitment is targeted at staff who are experiencing stress, and as well as generic promotion, targeted promotion is supported by Occupational Health, Human Resources, Team Managers and Union colleagues. Courses are delivered by two trained and accredited tutors and there is typically an attendance of 20 participants. The venues are mainly on the larger hospital sites, thus enabling more staff to access the course. Pre and Post course evaluation forms are collected, using Cohen’s Perceived Stress Scale as a basis.

A typical journey for an employee would be to attend a one hour taster session to find out if the approach would be helpful to them. If they wish to proceed, they complete an application form. Tutors screen all forms and allocate places, however if there are any risk factors to

¹ Mindful Nation UK, 2015, Report by the Mindfulness All-Party Parliamentary Group (MAPPG)
https://www.themindfulnessinitiative.org/Handlers/Download.ashx?IDMF=1af56392-4cf1-4550-bdd1-72e809fa627a
² Mindfulness Based Stress Reduction for NHSGGC Staff Pilot: Evaluation Report, Traci Leven Research, NHS Greater Glasgow and Clyde, December 2016
attending, the tutors will discuss other options with the applicant. The employee will then attend an MBSR course lasting 2 hours and delivered for 8 consecutive weeks and also complete home practice. This prolonged practice has the effect of establishing helpful Mindfulness techniques which help the employee combat stress.

The 2016 external evaluation report of the Pilot\(^3\) concluded that the effectiveness of the delivery of MBSR courses to staff was clearly shown. The courses were largely beneficial in equipping participants to effectively employ mindfulness techniques and effective in reducing stress and burnout and improving resilience. It predicted that wider scale participation in MBSR among NHSGGC staff could lead to a reduction in stress related absence. The report made recommendations for the sustainability of implementing a Mindfulness approach for the organisation. Subsequently the Staff Health Strategy governance group submitted a bid to the Endowments Committee and were awarded funding to deliver 20 more courses over a further 2 year period. This report details the evaluation results of this programme.

**Programme delivery**

From 2015 to 2019 six tranches of MBSR were delivered. In total 53 Mindfulness taster sessions and 28 MBSR courses have been delivered. Of these, 36 tasters and 20 courses were funded by General Endowments as part of the 2017-19 Programme.

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<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Tasters</td>
<td>9</td>
<td>8</td>
<td>11</td>
<td>6</td>
<td>10</td>
<td>9</td>
<td>53 (36*)</td>
</tr>
<tr>
<td>Courses</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>28 (20*)</td>
</tr>
</tbody>
</table>

*General Endowments funded

In total from 2015-19, approximately 884 staff have been allocated a place on a MBSR course and 1590 staff have been allocated a place on a Mindfulness taster session.

**Evaluation method**

Administration data was taken from NHSGGC spreadsheets to give class registration and course attendance figures. All participants were asked to complete an evaluation questionnaire which consisted of demographic information about the participant (age range, job title and sex), and two copies of Cohen’s Perceived Stress Score, these to be completed before (pre) and after (post) the course.

\(^3\) Mindfulness Based Stress Reduction for NHSGGC Staff Pilot: Evaluation Report, Traci Leven Research, NHS Greater Glasgow and Clyde, December 2016
Data from pre- and post- course evaluation forms were input by NHSGGC staff and sent to the researcher for preparation and analysis.

This report will focus on the results from the 2017-19 programme funded by General Endowments. The 2016 external evaluation report of the Pilot\(^4\) contains the full results for 2015-16 where a wider range of methods were used.

**Administration data**

Engagement data shows that of 362 registered participants, only 228 had submitted their evaluation forms. The range of submitted forms per course was from 3 to 19, and the average number of submitted forms per course was 13. Part of the Tutor agreement is that evaluation forms will be completed and returned, however some of the return rates are unsatisfactory to enable course evaluation.

Classes at registration had an average size of 21 participants, ranging from 16-27 per class. There was a significant reported drop–off in attendance during the 8 weeks of the course.

MBSR courses remain popular amongst staff and on the whole are fully booked to the suggested capacity of 20 participants. Courses were delivered over 8 consecutive weeks, mostly from 5:30-7:30 on weekday evenings.

<table>
<thead>
<tr>
<th>MBSR 8-week course - Location</th>
<th>Date the course commenced</th>
<th>Number of participants (who submitted evaluation qu’aires) n=228</th>
<th>Number of people registered on the courses *</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOL</td>
<td>04.09.17</td>
<td>17</td>
<td>26</td>
</tr>
<tr>
<td>IRH</td>
<td>03.10.17</td>
<td>20</td>
<td>23</td>
</tr>
<tr>
<td>STOBHILL</td>
<td>08.01.18</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>RAH</td>
<td>12.01.18</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>NEW VIC</td>
<td>21.02.18</td>
<td>12</td>
<td>25</td>
</tr>
<tr>
<td>QUEUH</td>
<td>12.06.18</td>
<td>9</td>
<td>Approx 20</td>
</tr>
<tr>
<td>STOBHILL</td>
<td>03.09.18</td>
<td>10</td>
<td>Approx 20</td>
</tr>
<tr>
<td>IRH</td>
<td>10.09.18</td>
<td>8</td>
<td>Approx 20</td>
</tr>
<tr>
<td>NEW VIC</td>
<td>09.01.19</td>
<td>18</td>
<td>27</td>
</tr>
<tr>
<td>QUEUH</td>
<td>10.01.19</td>
<td>19</td>
<td>18</td>
</tr>
<tr>
<td>GGH</td>
<td>14.01.19</td>
<td>17</td>
<td>21</td>
</tr>
<tr>
<td>GRI</td>
<td>29.08.19</td>
<td>17</td>
<td>22</td>
</tr>
<tr>
<td>QUEUH</td>
<td>02.09.19</td>
<td>7</td>
<td>21</td>
</tr>
<tr>
<td>NEW VIC</td>
<td>04.09.19</td>
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<td>23</td>
</tr>
<tr>
<td>STOBHILL</td>
<td>06.09.19</td>
<td>3</td>
<td>21</td>
</tr>
<tr>
<td>GGH</td>
<td>20.09.19</td>
<td>12</td>
<td>18</td>
</tr>
<tr>
<td>LEVERNDALE</td>
<td>30.09.19</td>
<td>11</td>
<td>23</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>228</strong></td>
<td><strong>362</strong></td>
<td></td>
</tr>
</tbody>
</table>

*from Public Health Team registration information

**Demographic data**

\(^4\) see 2
More women than men attended the courses, 90% were women and 10% were men. When compared to the male/female split in the organisation which is 79% women\(^5\), there remains a higher attendance rate amongst women.

<table>
<thead>
<tr>
<th>Sex</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>21</td>
<td>10</td>
</tr>
<tr>
<td>Female</td>
<td>195</td>
<td>90</td>
</tr>
<tr>
<td>TOTAL</td>
<td>216</td>
<td>100</td>
</tr>
</tbody>
</table>

People in the 45-54 age category were most likely to attend courses (37%), with those in the 16-24 (1%) and 65-74 (1%) categories being the least likely. When compared to the age split in the organisation where 28% of employees are aged 45-54\(^6\), there remains a higher attendance rate amongst this age group.

<table>
<thead>
<tr>
<th>Age</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-24</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>25-34</td>
<td>31</td>
<td>14</td>
</tr>
<tr>
<td>35-44</td>
<td>49</td>
<td>23</td>
</tr>
<tr>
<td>45-54</td>
<td>80</td>
<td>37</td>
</tr>
<tr>
<td>55-64</td>
<td>52</td>
<td>24</td>
</tr>
<tr>
<td>65-74</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>215</td>
<td>100</td>
</tr>
</tbody>
</table>

Job types were varied, showing that there was a spread of participants from across the organisation including nursing staff, administrators, team leaders and clinicians.

**The Cohen Perceived Stress Scale**

Despite completing the demographic information section on the evaluation form, only 185 of the 228 people who submitted forms had sufficiently completed their pre and post Cohen Perceived Stress Scale evaluation sections to include them in the following evaluation results.

The Cohen Perceived Stress Scale was used to measure stress. On this scale, scores of around 13 are considered average and scores of around 20 points or more are considered indicative of high levels of stress. Prior to the course, the mean perceived stress level amongst participants was 21.4 (20.0 in 2016 Pilot). After the course, the mean had reduced significantly to 13.2 (13.2 in 2016 Pilot). This shows that the courses are successful in reducing high stress levels experienced by participants. Overall, 90% (84% in 2016 Pilot) of participants saw a reduction in their perceived stress level after the course. This shows that the vast majority of participants benefit from the courses. The proportion who had a score indicating high stress levels reduced from 62% (48% in 2016 Pilot) to 10% (10% in 2016 pilot). Indications are that the people attending the course generally have higher stress levels, meaning the appropriate audience has been reached.

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\(^5\) NHSGGC Workforce statistics, extracted Jan 2020

\(^6\) NHSGGC Workforce statistics, extracted Jan 2020
These results are an improvement on the 2016 pilot data. The recent cohort of participants are showing higher stress levels at the pre-course stage, yet are reducing to an average level at post course stage. The proportion with high stress levels at the start of the most recent programme has been higher than for those participating in the Pilot, reducing to the same levels as the pilot at the end of the programme. More participants than in the Pilot are seeing a reduction in their stress levels as a result of the course. This suggests that marketing and recruitment has improved since 2016 to bring more appropriate participants (with higher stress levels) into the programme.

**Completed both Pre and Post Questionnaires  n=185**

**Perceived Stress Mean Score**

Mean stress scores fell from 21 to 13

**% with stress score of 20+**

The proportion with a ‘high stress’ score fell from 62% to 10%
Findings

The Mindfulness Based Stress Reduction approach applied by NHSGGC has been shown to be successful in reducing the stress levels of the vast majority of participants to safe levels. Perceived stress scores were obtained both before and after the course for 185 participants. Prior to the course the mean perceived stress level was 21.4. After the course was complete the mean score had reduced significantly to 13.2.

The majority of those attending the course were women and those aged 45-54. There was engagement from a range of job types and pay bands from across the organisation.

MBSR courses remain popular amongst staff and most were fully booked. However, there tends to be a drop-off in attendance over the duration of the 8-week course, also some participants do not even attend week 1 of their allocated course. Reasons for this could include: the content and homework of the course may not have been properly explained to the participant at the outset; the format of 8 consecutive weeks is not easily accessible to the participant; the content or delivery of the training is not satisfactory to the participant.

Evaluation data is not currently completed, collected and returned in a sufficiently complete way.

Tutor Feedback

Tutors who had delivered the courses from the programmes were invited to share their experiences of delivering the 2017-19 Programme. Here are some of their comments:

- Those who attended seem to have got a lot from the training in mindfulness
- Drop off rates were comparable to clinical groups
Currently research is weak on long term follow up of participants, there was a suggestion that a 1 year follow up of participants would add to the evidence base.

Many people seemed to have bypassed the taster session despite it being a pre-requisite on the application form – is there a way to guarantee all course participants have really attended the taster?

Frustration at accommodation – setting up rooms can be time consuming, noise levels / acoustics can exclude some participants with hearing difficulties, rooms can be dirty, and no room to store equipment at some venues.

Participants had given feedback to a tutor as follows – the time of class was unsuitable, people thought it would be more of a ‘quick fix’, course brought up difficult stuff for them, unable to practice so interest fell away.

Some participants want to attend the course to enable them to teach it to their patients – therefore they don’t entirely engage.

Payment system is sometimes slow.

Course manual is good – suggestions on how it may be improved.

Some participants are getting lost trying to find the venues.

Staff Feedback

A Staff Health Strategy Engagement event on 20/2/20 provided the following feedback on the MBSR Programme:

- Shift workers do not find it possible to attend the courses in their current delivery format – consider different delivery methods, time slots, chunking up the content differently.
- Consider parents and those with caring responsibilities when scheduling the courses.
- It is important that people who have high levels of stress can access the courses – managers are part of the solution.

MBSR Programme delivery implications

Improvements to the programme should include consideration of the following:

- Review expectations between commissioned tutors and NHSGGC project delivery.
- Work with facilities site managers to identify suitability of venues.
- Evaluation forms to be reviewed to enable easier evaluation of job type and band, and to ask for permission to follow up at 1 year.
- Feedback forms to be considered for participants reasons for the drop-off in course attendance.
- Application forms to be reviewed to ensure attendance at Taster session is guaranteed and requirement of home practice is emphasised.
- Sign in sheets at Taster sessions and Courses to be reviewed and consider adding signed section and payroll number to ensure pre requisite of Taster is guaranteed.
Review delivery method of the courses (2 hour sessions over 8 weeks) to enable access to all staff, especially for employees with caring/parental responsibilities, and those in shift work settings
Review /revisit the times and days the courses are delivered on to ensure maximum participation
Review tutor payment process to improve it
Review content for the Taster session – to emphasise that home practice and full course attendance is required
Administrators to consider increasing class sizes in order to accommodate the drop-off and get best value
Review course manual if required
Venue information – consider site maps/signs

**Recommendations**

It is recommended that:

- Funding is sought to enable continued delivery of the MBSR Programme in NHSGGC in order to reduce stress amongst employees, in particular the funding of a Pilot which will target teams who are experiencing higher stress levels with a tailored/flexible MBSR approach.
- Evaluation to include collecting evidence of any positive effects of the MBSR Programme on staff attendance levels, and longer term impacts. This will support the case to mainstream the Programme.
- MBSR Programme content and delivery should be reviewed to improve administration processes and widen access.

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