An Evaluation of the Implementation and Impact of the 'Stress Control Programme' on the Mental Health and Well-Being of Hospital Staff in the West of Ireland

Executive Summary Report

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Contents

Abbreviations

CBT	Cognitive Behaviour Therapy
GAD-7	Generalised Anxiety Disorder-7
HSE	Health Service Executive
NHS	National Health Service (UK)
NUIG	National University of Ireland, Galway
SAD	Stress, Anxiety and Depression
Saolta	Saolta University Health Care Group
SCP	Stress Control Programme
SPSS	Statistical Package for Social Sciences
UK	United Kingdom
WEMWBS	Warwick Edinburgh Mental Well-Being Scale
WHO	World Health Organisation

1.1 Introduction

The Stress Control Programme (White & Keenan, 1990) was implemented in seven Saolta hospitals in the West of Ireland from January 2017 to July 2017. This programme aimed 'to support staff to improve their mental health and well-being' (Saolta[1] University Health Care Group, 2014, p.26).

Research has shown that health sector workers are particularly vulnerable to stress, anxiety and depression (SAD) (Russell, Maître, & Watson, 2016). This is a concern as although SAD illnesses are associated with mental health, they can also affect physical health presenting as symptoms such as headaches, sleep disturbance, restlessness, fatigue, high blood-pressure and cardiovascular disease (Shirom, 2003; Spiers, 2003; &, Herrman, Saxena, & Moodie, 2005).

In the Irish context, the Economic and Social Research Institute (ESRI) compiled data from the Quarterly National Household Survey from 2002-2013, and found that stress, anxiety and depression (SAD) accounted for 18% of work-related illness (Russell et al., 2016). Shift workers are 1.3 times more prone to reporting SAD than other workers (Russell et al., 2016). Longer working hours were also associated with an increased incidence of SAD. The incidence of SAD increased as working hours increased (Russell et al., 2016).

Health sector workers are significantly over-represented in relation to reporting of SAD, with 20% of those with reported SAD coming from this sector (Russell et al., 2016). Heath sector workers constitute 11% of the Irish workforce. While there are no comparative statistics for Ireland, the NHS in the UK have estimated that raised stress levels account for the average worker being absent three days per annum (NHS, 2017). In 2015, the average number of days lost for sick leave in the health sector was 9.5 days. This accumulated to a total cost of €161.8 million and a rate of 4.2% in lost time to the sector (Department of Finance, 2014).

The hospital setting is frequently addressed as a priority area for health promotion with regard to patient health but less frequently about the health of staff (Naidoo & Wills, 2016). There is a considerable volume of research detailing interventions designed to decrease stress and increase well-being in the workplace (Gardner, Rose, Mason, Tyler, & Cushway, 2005; Tan et al., 2014; Van Gordon, Shonin, Zangeneh, & Griffiths, 2014; & Joyce et al., 2016). However, there is a dearth of studies evaluating the process of the programmes. While there are descriptive studies regarding the levels of stress and mental well-being in hospital staff, there are less intervention studies involving hospital staff specifically. This lack of intervention studies on stress management programmes with hospital staff highlights the need to evaluate and contribute to the evidence-base behind the Stress Control Programme.

[1] Saolta University Health Care Group (formally West/North West Hospitals Group) comprises of 6 hospitals across 7 sites: Letterkenny University Hospital (LUH); Mayo University Hospital (MUH); Merlin Park University Hospital (MPUH); Portiuncula University Hospital (PUH); Roscommon University Hospital (RUH); Sligo University Hospital (SUH); and University Hospital Galway (UHG).

This evidence-based programme, which involved Cognitive Behavioural Therapy (CBT) and group psycho-education, was implemented as part of the Saolta University Healthcare Group national agenda for 2015-2017. The programme aimed to promote the mental health and well-being of its workforce (HSE, 2015).

This report evaluates the implementation and the impact of attending this Stress Control Programme (SCP) on self-reported mental well-being of staff in hospital settings in the West of Ireland. Previous evaluations of the Stress Control Programme in the UK (see White & Keenan, 1990; White, 1998; Burns, Kellett, & Donohoe, 2016; &, Delgadillo et al., 2016) and Ireland (see Mills, Mowlds, Dyer, Corr, & Kavanagh, 2016) found the programme to be effective in terms of reducing stress and increasing well-being in a large group setting. However, previous evaluations of the programme were based in community settings. This evaluation was warranted as this pilot programme was aimed specifically at staff in a hospital setting. This evaluation focused on three phases of the Stress Control Programme that took place across three hospital sites from May to July.

This executive summary report outlines high level findings from this study. An overview of participants' profile is provided. Key findings that emerged from the study related to mental well-being and anxiety levels pre- and post-programme are outlined in the subsequent sections. The report also discusses participants' attitudes towards the implementation of the Stress Control Programme and suggestions for future improvement of the programme[2].

1.2 Methodology

A mixed method approach was employed to evaluate the implementation and short-term outcomes of the programme. Self-administered pre-and post-intervention questionnaires were completed by participants' attending the programme. Pre-and post-intervention questionnaires were also completed by a control group of participants' (i.e. hospital staff who did not attend the programme) using the same six-week pre-and post-schedule. The questionnaire explored self-reported stress levels using the Generalized Anxiety Disorder 7-item (GAD-7) scale (Spitzer, Kroenke, Williams, & Lowe, 2006) and Warwick-Edinburgh Mental Well-Being Scale (WEMWBS) (Tennant et al., 2007).

Qualitative data, from semi-structured interviews with the facilitators, were collected at the end of each six-week programme to explore the implementation of the programme in each hospital. These interviews examined trainers' perceptions of barriers and enablers of the implementation of the Stress Control Programme. One key factor involved in the successful implementation of health promotion programmes is the support to execute the programme as it was planned (Thorogood & Coombes, 2010). Hence, questions addressing support were asked in the semi-structured interviews.

[2] For a full report and in-depth findings of the study, see Kelly, (2017).

1.3 Participant Profile

- A total of 48 staff[3] participated in the Stress Control Programme across three hospitals from the Saolta University Healthcare Group.
- The age of participants within the intervention group ranged from 25-63 years of age. The mean age was 47 years. Similar results were found in the control group, with the age profile ranging from 24-60 years of age. The mean age was 42 years.
- Of the 25 participants who comprised the intervention group, 8% (n=2) of those participants were male and 92% (n=23) were females.
- Overall, 39% of the intervention group (n=9) comprised of clerical and administrative staff, 17% were social workers (n=4). Medical staff and nurses represented 13% of the group respectively (n=3). Human resource staff represented 9% of the intervention group (n=2), while technicians and home carers made up 4% of the group individually (n=1).
- In total, 60% (n=9) of the intervention group who participated in the post-programme questionnaire had completed the entire six sessions of the programme, with a further 20% (n=3) completing five and three sessions respectively.

1.4 Results

Mental Well-Being and Anxiety Levels

High Level Findings

- Prior to completing the Stress Control Programme, 25% of the intervention group reported rarely having energy to spare. Reported energy levels increased post-programme with a decrease in the category of rarely having energy to spare to 0%. There was in increase in having energy to spare some of the time from 42% to 60%.
- In regard to being able to make up one's mind about things, 46% of the intervention group reported being able to make up their mind often prior to attending the programme. This score increased to 87% of participants feeling this way post-programme.
- A decrease in self-reported anxiety levels were also visible in the intervention group post-programme. In response to feeling annoyed and irritable nearly every day, there was a decrease from 12.5%, pre-programme, to 7%, post-programme, in the intervention group. Similar responses were noted in the categories of having trouble relaxing and worrying too much.
- As can be seen in Figure 1.1, the mean scores for the participants' ratings of their mental health were quite similar in both the intervention and the control group prior to the intervention group attending the SCP. The average mean score was 3.65 for the intervention group, and 3.66 for the control group pre-programme.

[3] The sample size for this study was small due to the low numbers of attendees at the SCP sessions. As this was an evaluation of the implementation and the impact of the programme, the attendance rates at the programme were reflected upon in the implementation data.

Scores ranged from 0-5 with a low score signifying poorer mental well-being and high scores indicating better mental well-being.

- The mean scores for the self-reported mental well-being, taken post-programme for the intervention group and after a six-week period for the control group, are markedly different. This can be seen in Figure 1.2, where the mean scores for the intervention group are higher across all the indicators of mental well-being[4]. The average mean score for the intervention group post-programme was 3.98, compared to 3.33 in the control group.

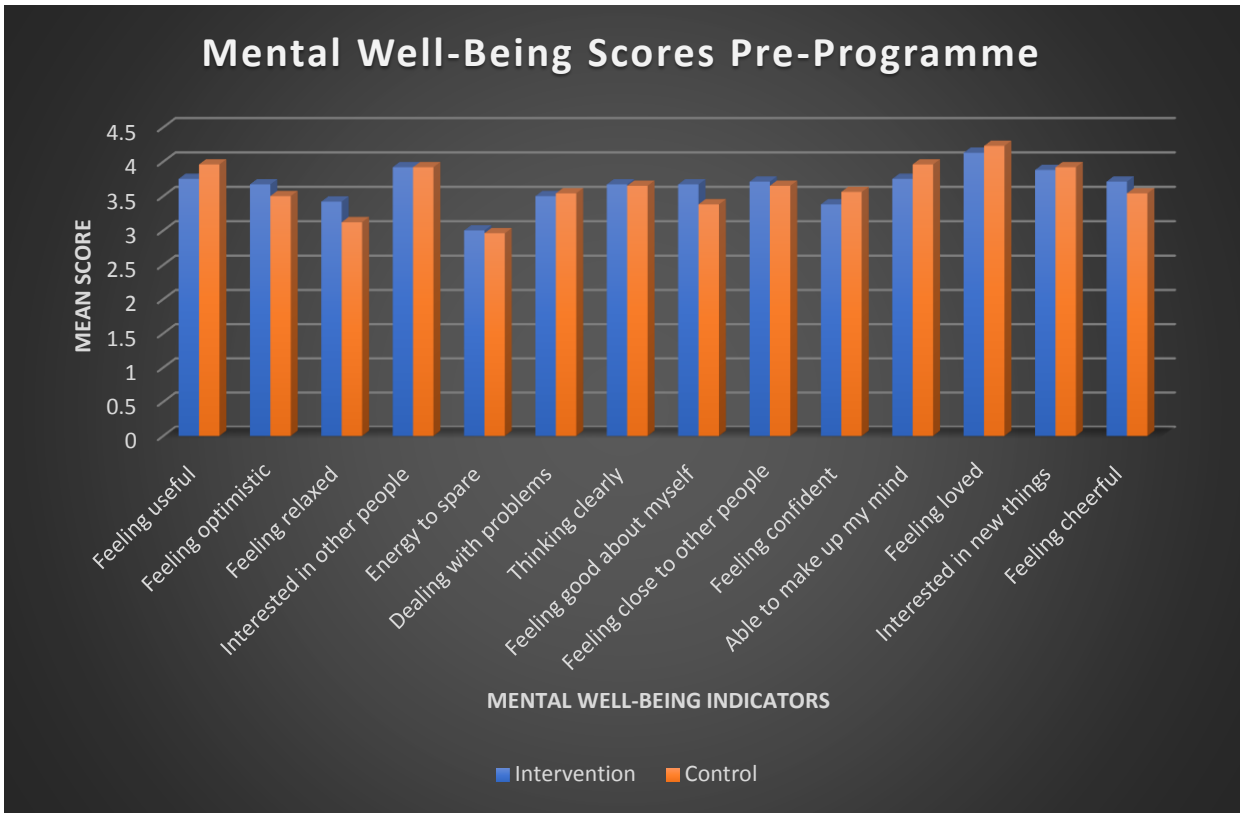

Figure 1.1 Mean Mental Well-Being Scores Pre-Programme

[4] Although statistically significant differences were noted at the 0.05 level between the post-programme mental well-being levels of the intervention and the control group, the researcher acknowledges that these findings cannot be generalised to the wider population due the small sample size employed (n=61).

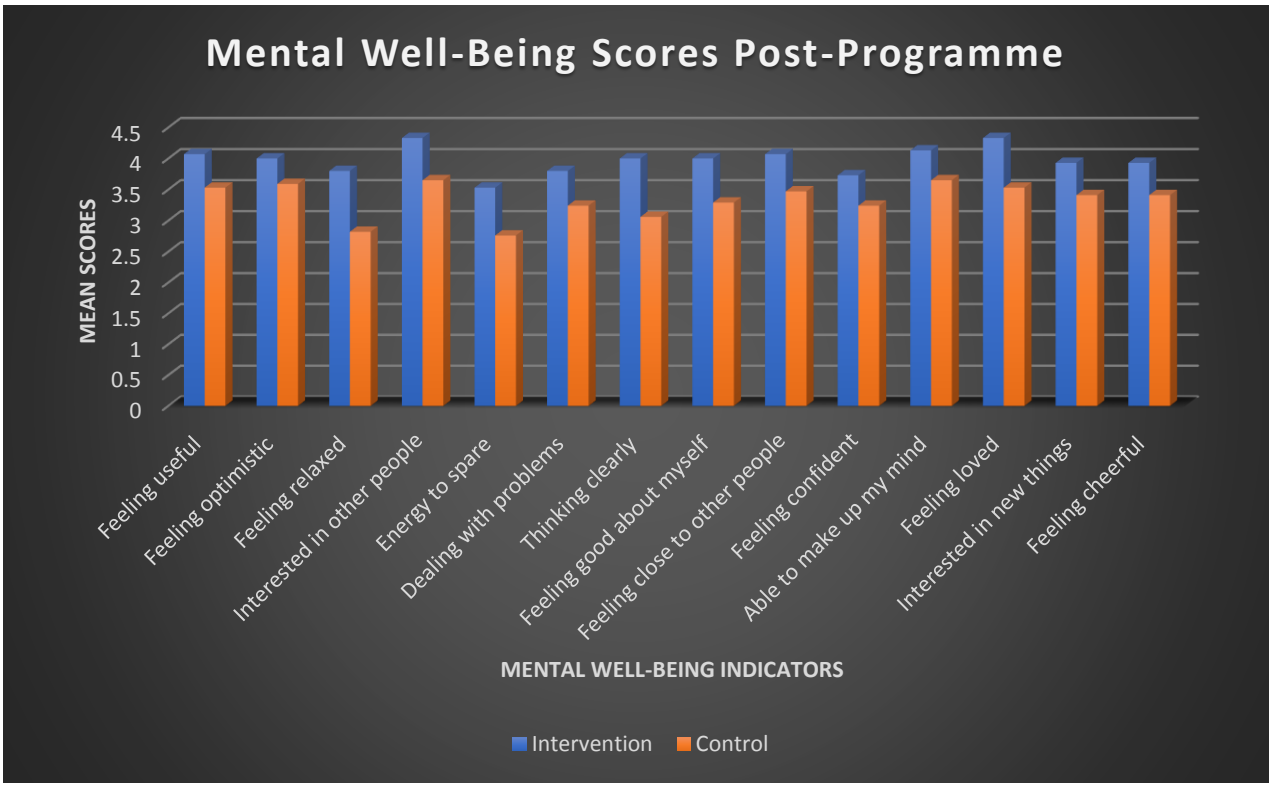

Figure 1.2 Mean Mental Well-Being Scores Post-Programme

- As can been seen in Figure 1.3, there is some variation in the mean score of anxiety levels between the intervention and the control group prior to the intervention group completing the SCP. Scores ranged from 0-3, with higher scores indicating higher levels of anxiety. The average mean score for anxiety levels pre-programme was 1.14 in the intervention group, compared to 1.35 in the control group.
- However, there was a greater difference in self-reported anxiety levels between the groups post-programme. As can be seen in Figure 1.4[5], the average mean score for anxiety levels in the intervention group post-programme was 1.2, compared to 2.79 in the control group.

[5] Overall, the changes in self-reported anxiety levels pre- and post-programme for both groups were not statistically significant. The results for the intervention group remained analogous between the pre- and post-programme questionnaire. There was an increase in self-reported anxiety levels among the control group between the pre- and post-questionnaire. However, the researcher again acknowledges that due to the relatively small sample size of this study, it is not possible to generalise these results to the general population.

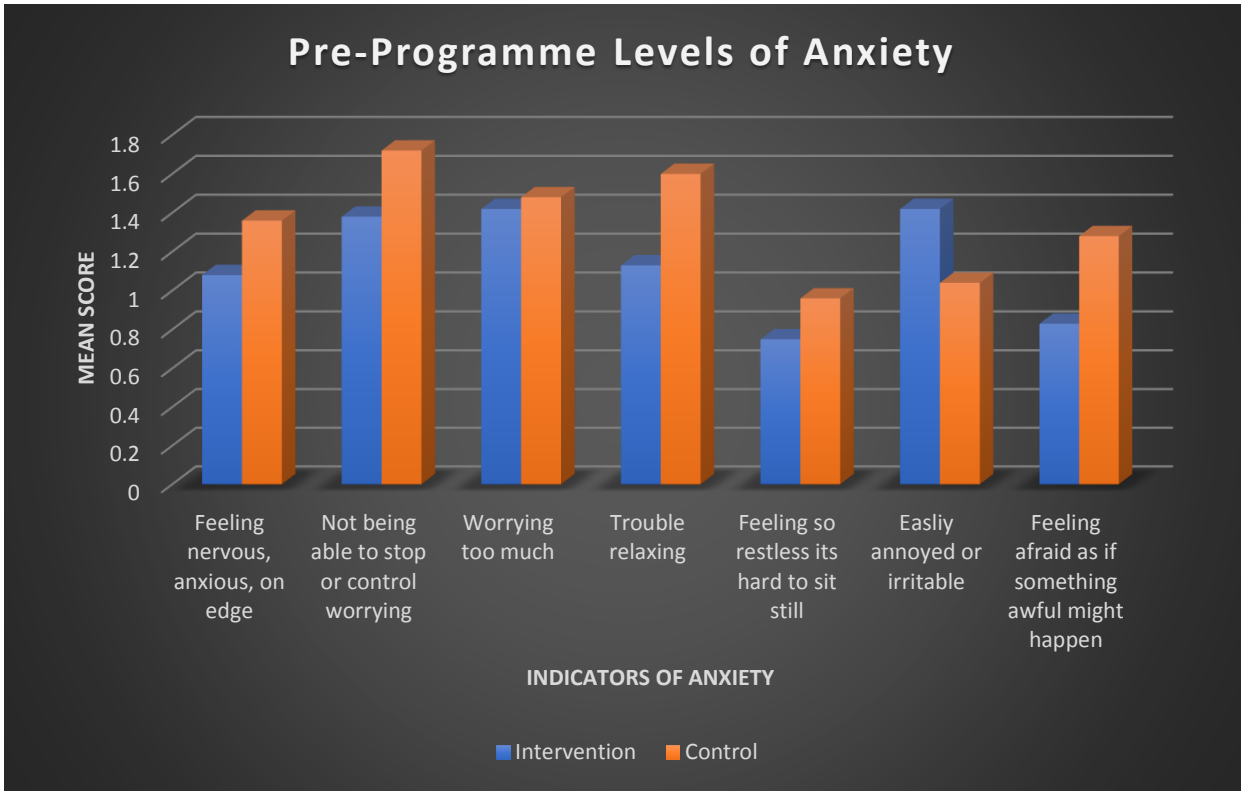

Figure 1.3 Pre-Programme Mean Levels of Anxiety

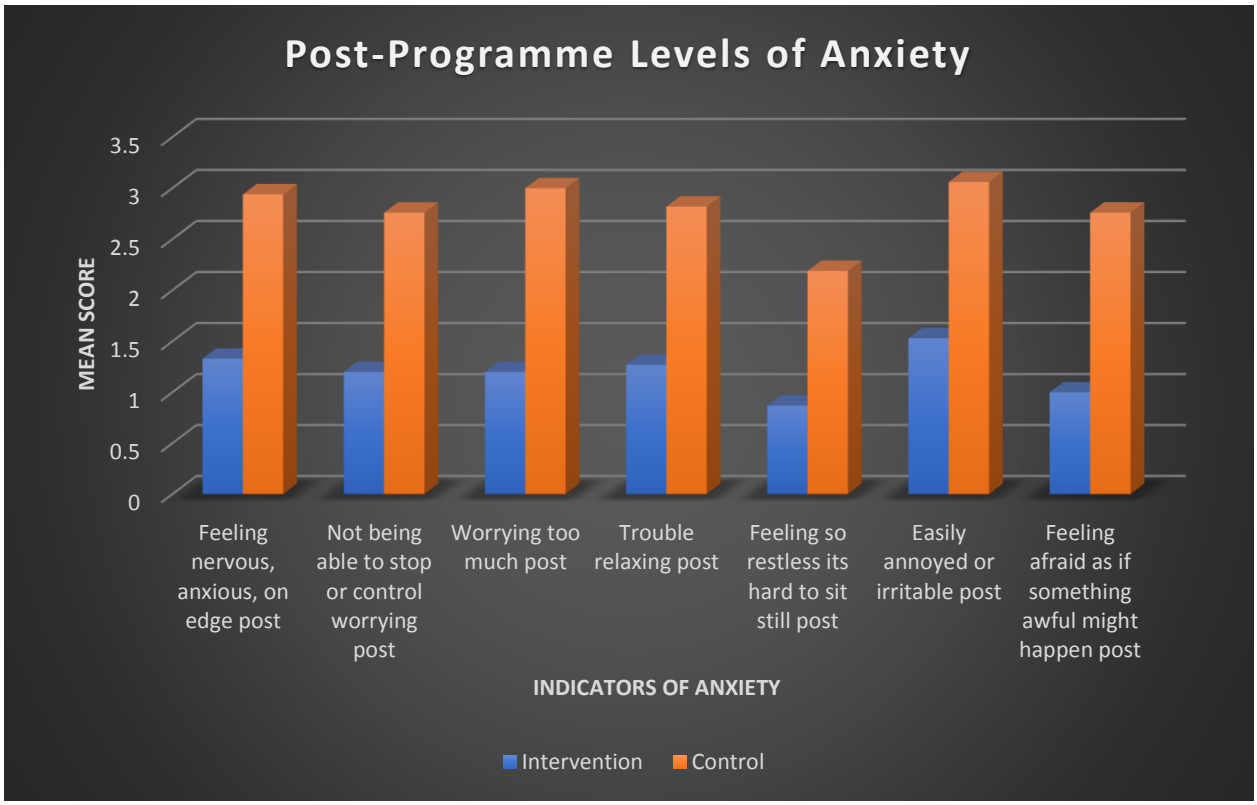

Figure 1.4 Post-programme mean levels of anxiety

- The relationship between the generalised anxiety disorder categories and the effects of anxiety on everyday life was also investigated.
- There was a strong negative correlation between 'having trouble relaxing' and 'being able to take care of things at home' in the intervention group. There was also some level of correlation and statistical significance between participants' being able to do their work and the anxiety indicators within both groups.
- There was a strong negative correlation between 'feeling so restless that it's hard to sit still' and 'being able to do work' in the intervention group, with high levels of restlessness associated with low levels of being able to do work.
- Results show that home life is most affected by anxiety levels in both the intervention and the control group pre- and post- programme.
- The relationship between the scores from the mental well-being and anxiety scale results, and practicing the skills taught in the programme everyday was also explored. A medium, positive correlation was noted between mental well-being total scores post-intervention and practicing the skills every day, indicating that higher levels of mental well-being were associated with high levels of practicing the skills taught in the programme. There was a weak negative correlation between general anxiety results post-programme and practicing the skills every day, with higher levels of practicing the skills associated with lower levels of anxiety.
- A strong, positive correlation was found to exist between the two variables of practicing the skills taught in the programme and reading the booklets, with higher levels of practicing skills associated with higher levels of reading the information booklets.

1.5 Attitudes towards the Implementation of the Stress Control Programme

Positive Aspects of the SCP

- Results showed that the intervention group responded positively to all aspects of the programme. As is outlined in greater detail in Kelly (2017), 87% (n=13) of participants agreed that the sessions were useful; 66% (n=10) expressed being happy with the amount of information provided in each session; 58% (n=8) of participants were happy with the number of slides used per session; and 87% (n=13) would recommend the SCP to others.

Negative Aspects of the SCP

- A number of participants reported that some aspects of the programme were, at times, too repetitive. However, the researcher is aware that the programme was purposively designed to be repetitive so that participants with high stress levels could absorb the material.

Suggested Areas for Improvement

A number of changes were suggested for future running of the programme by participants of the Stress Control Programme, members of the control group who did not attend, and the programme facilitators. These recommendations are as follows:

- ***The introduction of examples of stress in a clinical setting and ways to deal with them:***

Participants indicated that the inclusion of some examples of stressful situations within the hospital workplace environment and how to deal with them, as opposed to just community settings examples would be a welcome addition to the programme content.

- ***Earlier advertising of the programme:***

The issue was advertising and awareness raising of the programme was mentioned by the control group, the intervention group and the facilitators. The control group reported that not being able to get time off work as a reason for not attending the programme (%). Earlier advertising of the programme may assist in helping staff to organise time off to attend.

- ***The use of different mediums to advertise the programme in order to target all staff groups:***

The use of different methods of advertising is crucial in order to target all staff groups within a hospital setting. Lack of awareness about the programme and when it was taking place was cited as a reason for not attending the programme among the control group. This issue was also highlighted in the interviews with the facilitators as being a key area where change was needed in order to increase attendance at the programme.

- ***Changes to the running times of the programme:***

While the three programmes that were evaluated were all ran at different times, the issue of programme timing was raised in all three settings. Alternating the times of the programme over the course of the year may assist in increasing attendance rates. Further buy in from management may also assist in the issue of the running time of the programme.

- ***Greater engagement of management at all levels to support staff attendance at the programme:***

The support from all levels of management is necessary for the sustainability and future success of the Stress Control Programme. Staff support and encouragement to attend was highlighted as being key to breaking the stigma of stress in the workplace so that staff feel comfortable asking for time to attend the programme.

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Disclaimer