



Wellness in allied health students: the case for change

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Abstract

Introduction: *The case for change. There are increasing mental health issues among young people, including higher education students. millennial students face unique challenges relating to attention, critical thinking and managing stress. Specifically, allied health students engage in multiple placements in which they need to interact with real people in real time while being evaluated in assessment and treatment strategies. Some universities have been using wellness programs and mindfulness strategies to support student mental health across campuses for some time. However, as allied health students face unique challenges, there is a need for a particular focus on wellness at an individual allied health course level. The curriculum in allied health courses is determined by accreditation bodies and is comprehensive with little scope for additional information. It is possible for short activities to be embedded in tutorials and the authors argue a focus on wellness is vital for the future allied health workforce.*

Methodology for pilot project. *This project used questionnaires to investigate student perceptions of a short program of activities to promote wellness and mindfulness in third-year speech pathology students who were also engaging in clinical placements.*

Results and discussion. *Students were positive about the activities, developed their own wellness plan and learned new strategies to manage their mental health at university and in their future careers.*

Future directions. *This short program could easily be adapted to other allied health courses.*

Keywords: allied health, wellness, mental health, mindfulness, students

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INTRODUCTION

According to the World Health Organization, mental health is ‘a state of well-being in which every individual realises his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community’ (World Health Organization 2014, para 1). One in five (20%) Australians aged 16–85 experience a mental illness in any year, resulting in almost half (45%) of Australians experiencing a mental illness in their lifetime (World Health Organization, 2014). Four million people received mental health-related prescriptions in 2017–18 (Australian Institute of Health and Welfare 2019) but 54 per cent of people with mental illness are not accessing treatment (Australian Bureau of Statistics 2009).

The number of young people who experience stress-related anxiety and depression has reached epidemic proportions, with Australians aged 18–24 years having the highest prevalence of mental illness and being at the highest risk (Mission Australia, 2017, p. 5). This is the age group of many university students, who have the additional stress and pressure of multiple commitments, including study, assessments and often full-time work, affecting their mental health and wellbeing (Wright & Winslade 2018, para. 2). Similarly, in the United States of America (US) and Canada, it has been found that the mental health of students is poor (Danitz & Orsillo 2014; Rose, Godfrey & Rose 2016). For example, in Canada, 89 per cent of students feel overwhelmed by their workload, with 57 per cent feeling overwhelming anxiety (Rose et al. 2016)—and these rates are increasing. In the US, 87 per cent feel overwhelmed and 21 per cent feel anxiety (Danitz & Orsillo 2014). There are a number of reasons for this decrease in mental health among the young.

MILLENNIAL STUDENTS

The current demographic of young people born post-1990, generally referred to as millennials, have grown up with highly developed technology, mobile devices and constant access to the internet that have become an indispensable part of their lives. It has been suggested that this has resulted in millennials having a unique set of expectations and characteristics of connectivity, change and mobility (Nimon 2007; Oblinger 2003). Millennials are continuously bombarded with stimuli that can be challenging to manage (Bowman, Levine, Waite & Gendron, 2010), creating information overload. There is evidence that human cognition is ill-suited both for attending to multiple inputs and for simultaneously performing multiple tasks (Marois & Ivanoff 2005, p. 296). The hyperkinetic environment drives a perceived need for multi-tasking although true multi-tasking is impossible, as one can only pay attention to a single task at a time (Killingsworth & Gilbert 2010, p. 932).

During multi-tasking, the brain is actually distracted and inefficient (Ophir, Nass & Wagner 2009). Findings suggest that the distracted brain sacrifices areas important for attention and alertness to recruit enough brain resources to perform a secondary cognitive task (Hölzel et al. 2009, p. 11). When people believe they are multi-tasking, they are actually just switching from one task to another very rapidly and every time they do, there is a cognitive cost in doing so. This sacrificed time

is known as *attentional blink* because the brain experiences a delay of 200–500 milliseconds during each attentional switch, which is increased by stress (Levitin, 2014). Anecdotal evidence suggests that the simple fact of having an unanswered message on your mobile device is sufficient distraction to lower your IQ score by 10 points (Levitin 2014). Attention deficit trait has been identified as a newly recognised neurological occurrence that was developed as a response to a hyperkinetic environment (Hallowell 2005, p. 54). Attention deficit trait is described as similar to the typical version of attention deficit disorder. However, it is a condition induced by modern life, in which people have become busy attending to so many inputs and organising outputs that they become increasingly distracted, irritable, impulsive, restless, anxious and, over the long term, underachieving (Hallowell 2005, p. 54).

STRESS

There are multiple factors that contribute to perceived stress levels, including increased social media use (Sidani et al. 2016, p. 36), which is common among university students. Sidani et al. (2016) investigated social media use in a group of young adults in the US and found individuals who had higher social media site visits per week and those with a higher global frequency score had significantly increased rates of depression (Sidani et al. 2016).

Another stress factor is high levels of 'anxious preoccupation' that can decrease performance (Bellinger, DeCaro & Ralston 2015). Anxious preoccupation is the inability to deal with challenging and stressful situations, such as exam anxiety that particularly affects higher education students. For millennial students, these challenges result in poor mental health, affecting their academic performance (Rose et al. 2016).

Allied health students face additional challenges, with high academic contact hours and a mandatory requirement to complete hundreds of hours of clinical education placements 'in an increasingly complex and changing environment' (Rodger et al. 2008, p. 56). These students need to deal with the 'ambiguity of practice' (Skovholt & Trotter-Mathison 2011, p. 79) for which they often feel unprepared and experience performance anxiety. Allied health students need support to manage their emotions, develop resilience and learn coping skills so they can complete the challenges of tertiary education and prepare for future practice. Universities have a duty of care and responsibility to equip students to manage their own stress levels and mental health across their lives and roles. A focus on wellness is one strategy that shows promise.

WELLNESS

Wellness is a strengths-based approach for managing mental healthcare and a variety of models are presented in the literature (Myers & Sweeney 2004, p. 234). Research shows that wellness is a complex construct involving multiple factors (Hermon & Hazler 1999; Myers & Sweeney 2004). Some universities have been offering wellness programs for a considerable time (Hermon & Hazler 1999; Rose, Godfrey

& Rose 2016; Russell et al. 2011), such as libraries offering de-stressing activities during examination periods (Rose et al. 2016). Research has found that students who embed wellness practice, such as spiritual behaviour, leisure activities and sleep hygiene, into their lives are happier (Hermon & Hazler 1999). This indicates the benefits of encouraging and supporting students to focus on their own wellness as part of an undergraduate course curriculum.

Although a whole-of-campus approach is important (Rose et al. 2016), a wellness focus can be embedded into a specific course. For example, Yager (2011) embedded a wellness curriculum into a pre-service teacher education course that focused on developing trainee teacher students' wellbeing and how they might embed wellbeing activities and practice into their future classes. Results from questionnaires and assignments indicated students had experienced transformative learning in the area of their wellbeing. Stalnaker-Shofner and Manyam (2014) carried out a wellness intervention program with postgraduate students during their counselling practicum and found statistically significant improvements on the Five Factor Wellness Inventory after just one workshop. The workshop included a follow-up wellness plan for students to implement. Even a 90-minute acceptance-based-behavioural therapy intervention for first-year law students affected their levels of depression on the Depression, Anxiety and Stress Scales and resulted in high acceptance scores on the Philadelphia Mindfulness Scale compared to a control student group (Danitz & Orsillo 2014).

In their meta-analysis of stress reduction interventions in higher education, Regehr, Glancy and Pitts (2013) found that interventions do influence students. Cognitive, behavioural and mindfulness-based interventions of a range of lengths can reduce symptoms of anxiety (Regehr et al. 2013). However, the effect of short wellness interventions specifically for allied health students is not widely reported in the literature.

Universities have a responsibility to support wellness in students (Rose et al. 2016). Although university-wide programs have an effect, individual-level interventions can be tailored to specific student's needs, such as placement demands for allied health students and the requirements for self-care during their careers (Skovholt & Trotter-Mathison 2011). An eclectic approach can be used, as it seems that various lengths, components and strategies can be successful in reducing stress in students (Regehr et al. 2013). Mindfulness training has been found to be an effective component of wellness and stress management (Regehr et al. 2013).

MINDFULNESS

One frequently used tool to enhance wellness, reduce stress and improve mental health is mindfulness training (Regehr et al. 2013). Mindfulness can be defined as a mental discipline aimed at training attention and involves learning to focus attention on moment-by-moment experiences with an attitude of curiosity, openness and acceptance (Hassed et al. 2009, p. 389). Mindfulness is the awareness that emerges through paying attention—purposeful, non-

judgemental and in the present—to the unfolding of moment-by-moment experiences (Kabat-Zinn 2003). Mindfulness is traditionally associated with Buddhist spiritual practice but does not depend on any religious association (Dobkin & Hutchinson 2013; Hassed et al. 2009). Mindfulness practice involves meditation that is used to develop the skill of mindfulness (Marchand 2014). Mindfulness practice is regarded as a logical extension of 'reflective practice', the goal of which is to become more aware of one's own mental processes, recognise judging thoughts and to act with principle and compassion (Dobkin & Hutchinson 2013). Reflective practice is a key attribute of allied health practice (Mann, Gordon & MacLeod 2009) and self-compassion is crucial for managing stress, developing compassion for others and promoting wellbeing (Sinclair et al. 2017).

Mindfulness training improves functioning in areas related to executive function, attentional control, self-regulation, sensory processing, memory and regulation of the stress response (Kang et al. 2012 Marchand 2014), all of which are challenges for millennial students. There is also evidence from functional magnetic resonance imaging studies to show that mindfulness training results in increased cortical thickness in the hippocampus, which is involved in memory and learning (Fox et al. 2014; Pagnoni & Cekic 2007). Both these functions have been shown to be important in the process and outcomes of mindfulness training (Gard, Hölzel & Lazar 2014; Kilpatrick et al. 2011; Lazar et al. 2005; Pagnoni & Cekic 2007). Mindfulness practices have become increasingly popular as therapeutic strategies for managing stress-related anxiety and depression. Khoury et al. (2013), in their meta-analysis of mindfulness-based therapy interventions, found mindfulness practice to be an effective treatment for anxiety, depression and stress.

Mindfulness training is being widely used across the lifespan for a range of mental health and medical issues (Gotink et al. 2015; Khoury et al. 2013), including in schools and higher education (Shapiro, Brown & Astin 2008; Hassed et al. 2009). Dobkin and Hutchinson (2013) conducted studies on medical students from 14 US medical schools and demonstrated links between anxiety measures, high-stakes mathematical performance and mindfulness practice. They also showed that students who followed mindfulness programs experienced decreased psychological distress and an improved quality of life. Further, mindfulness training improved students' retention of the information conveyed during the lecture in each of the three experiments (Dobkin & Hutchinson 2013). Others have also demonstrated this finding (Ramsburg & Youmans 2014). Mindfulness training is also being used to support healthcare workers to reduce their stress and promote wellness (Raab 2014), indicating usefulness for allied health students.

THE CASE FOR CHANGE

The increasing mental health challenges of millennials, coupled with their increasing distractedness and stress levels, require intervention by universities. Allied health students have additional stresses caused

by increased academic load, placements in complex work environments and placement performance anxiety, requiring specifically tailored activities. Wellness programs show promise and could be embedded into a single unit of a course, giving just-in-time support for allied health students attending placements. Mindfulness has been widely used as a tool to support the development of reflective practice in healthcare workers and would be appropriate to support allied health students. Although allied health courses have busy curriculums, short efficient programs can yield positive outcomes and ought to be evaluated with students.

This pilot project developed a wellness program, including mindfulness activities that was piloted with third-year undergraduate speech pathology students at an Australian university to inform the feasibility of a short, efficient intervention for allied health programs. The project aimed to support students to manage their mental health, reduce stress and consider their wellness by developing a plan and engaging in activities. It also aimed to give teaching staff a vocabulary and reason to discuss mental health directly with students.

METHODOLOGY

WELLNESS PROGRAM

The first author's interest in developing students' wellness was sparked when, to the shock of her peers and staff who had not noticed any difficulties, a high-achieving student became seriously mentally ill in her final year of her four-year undergraduate degree program. It appeared both staff and students needed a vocabulary and permission to engage in discussions about stress levels, mental health and the supports available, encouraging and enabling students to seek professional help earlier. It was decided the focus would be on wellness, with students being proactive in managing their own wellbeing. A wellness plan from the University of Nebraska–Lincoln (UNL), who have been developing wellness for over 30 years (Barth & Johnson 1983), was chosen. UNL has been using their Wellness Model, especially developed for the university setting, since 2008 as a whole-of-university program (UNL 2008). In this study, UNL's Wellness Model was adapted for use in tutorials for a single unit of study.

The unit chosen was the second semester practicum unit in third year, the second major practicum experienced by the students and the last one before the high-stress block placements in fourth year. Students attended weekly tutorials and one day on placement each week. At each tutorial during the 13-week semester, the topic was addressed for 10–20 minutes. The wellness program had a four-pronged approach.

1. Wellness discussion

Students were introduced to the concept of wellness using UNL's Wellness Model (UNL 2008). Their model has seven areas of wellness: emotional, social, physical, environmental, occupational, spiritual and

intellectual. Students discussed each category and brainstormed personally relevant activities week by week. Students also discussed:

- triggers that decrease wellness and how to manage them
- developing a support network
- early warning signs that professional help may be required
- managing stress
- dealing with procrastination
- managing distractions
- time management strategies.

Discussion of wellness factors is important to include in an intervention (Yager 2011) and engaging millennials in discussion with each other supports the development of critical thinking, increasing the likelihood of behaviour change (Russell et al. 2011). As Russell et al. (2011, p. 119) stated, 'critical thinking within wellness courses can be defined as reflective thinking used to make reasonable and defensible decisions about health choices'.

2. Mindfulness activities

Each week, students were taught a mindfulness activity to practice and potentially add to their wellness plan. The activities chosen were silent meditation with a focus on the breath, three big sighs for stress reduction, a guided relaxation meditation, mindful eating, free writing in a journal, mindful walking, keeping a gratitude journal and making a finger labyrinth.

3. Wellness plan

Students were encouraged to develop their own wellness plan to use during fourth year. They were provided with a template with daily, weekly and monthly activities allocated for each area. Development of a personal wellness plan has found to be helpful for students (Yager 2011). In fourth year, students were allocated to small tutorial groups, including a member of the academic staff and were expected to provide a copy of their plan to their tutor at the beginning of fourth year. Tutors then referred to health and wellness during fourth-year tutorials, as it is important for students and staff to work in partnership to implement wellness strategies (Goss 2011).

4. Resources

Resources to support mental health were also discussed. A handout was provided, various resources were shared on the learning management system and links were provided to evidence-based websites and apps (e.g., a website for students called The Desk [University of Queensland 2019] and the Headspace app [Headspace 2019]).

The purpose of the program was to offer students permission to talk about mental health, provide them with a vocabulary to do so, present

strategies to manage mental health and engage all academic staff in supporting the mental health and wellness of speech pathology students.

SUBJECTS

Twenty, third-year speech pathology students enrolled in their second semester clinical practicum unit were required to attend two-hour tutorials each week alongside their one day a week placement at a school or adult clinic as part of the university curriculum.

QUESTIONNAIRE

At the end of the semester, students were invited to complete an anonymous online questionnaire for quality assurance purposes. Students were sent a link via email and were reminded both in tutorials and via email to complete the questionnaire. However, there was no obligation to complete and no penalty for not completing the questionnaire. As the questionnaire was an evaluation of a program already occurring for students, ethics clearance was not deemed necessary by the human ethics committee of the university. The purpose of the questionnaire was to explore how many of the strategies students had previously been exposed to and whether students would use the strategies in the future. The questionnaire was open for a month and the response rate was 50 per cent ($n = 10$). The questionnaire contained nine yes/no questions and one open-ended question for free text answers (see Appendix). Comments from the anonymous end-of-semester evaluation tool were also examined and informal conversations held with staff members who had students in tutorials in 2017.

RESULTS

Students willingly participated in activities each week and freely discussed and shared strategies and experiences. They engaged in discussion about mental health and wellness. One student privately reported seeking additional support for a developing mental health issue because of the discussions.

WELLNESS

The questionnaire results related to this area are shown in Table 1. Only 10 per cent of students had developed a wellness plan prior to the course and 90 per cent agreed they would be implementing new strategies to manage their wellness in the future. Some areas of wellness were less familiar to students than others. Although around two-thirds of students had implemented strategies in the past, students reported they found new strategies for overcoming procrastination (100%), managing stress (90%) and dealing with distractions (70%) through the tutorial discussion.

Table 1. Wellness questionnaire results

Question	% Yes (n)
Did you have a wellness plan (either formal or informal) before the start of this semester?	10% (1)
Did you consider these things to be part of your health and wellness before the start of this semester:	
Emotional wellness	70% (7)
Social wellness	80% (8)
Physical wellness	90% (9)
Environmental wellness	20% (2)
Occupational wellness	20% (2)
Spiritual wellness	30% (3)
Intellectual wellness?	30% (3)
Did you find the discussion of a wellness plan useful?	90% (9)
Will you be implementing new strategies to manage your health and wellness now?	100% (10)
Prior to the start of this semester have you implemented strategies to manage:	
Procrastination	70% (7)
Stress	60% (6)
Distractions?	60% (6)
During the semester did you find new strategies to manage:	
Procrastination	100% (10)
Stress	90% (9)
Distractions?	70% (7)

MINDFULNESS ACTIVITIES

For each of the mindfulness activities, 50 per cent or less of the students had tried them before. The majority of students enjoyed the strategies and would consider using them again. These results are shown in Table 2.

Table 2. Mindfulness questionnaire results

Question	Had you tried or regularly used any of these mindfulness strategies before the start of this semester? % Yes (n =)	Did you enjoy trying/using these strategies in the tutorials? % Yes (n =)	Would you use them again in your life? % Yes (n =)
Silent meditation focus on breathing	50% (5)	100% (10)	90% (9)
Three big sighs for stress reduction	40% (4)	90% (9)	100% (10)
Guided meditation/relaxation	50% (5)	90% (9)	100% (10)
Mindful eating	20% (2)	70% (7)	78% (7)
Keeping a journal	40% (4)	80% (8)	80% (8)
Bushwalk/mindful walking	30% (3)	90% (9)	100% (10)
Gratitude journal	10% (1)	80% (8)	90% (9)
Labyrinth	0% (0)	80% (8)	80% (8)

FREE TEXT ANSWERS

There were only three free text comments recorded. These were all positive as this example shows:

I found this a really practical and helpful thing to add in to the unit plan. It allowed me to make sure I was putting my overall health first. I usually run myself into the ground during semester as I have always considered that is what was expected of me. Now that I am aware that the university does not expect this of me but instead would rather I was healthy I feel a lot less stressed about completing fourth year (third-year student).

At the end of semester, eight students completed the university's standard unit evaluations (40% response rate). When writing free text comments on the best aspects of the unit, six students (75%) mentioned the wellness program as these examples demonstrate:

I love Abigail's holistic approach to health and wellness e.g. writing a health and wellness plan. Practicing meditation, mindfulness activities particularly the nature walk where we took pictures of flowers that caught our interest. She really highlighted how

important it is to be mindful rather than having a mind full (third-year student).

I really enjoy the mindfulness aspect of this unit. I found this semester very stressful and it really helped my overall quality of life (third-year student).

The mindfulness activities were THE BEST! It was so nice to be able to go to class and just take a minute to relax before getting started (third-year student).

The following year (2017), students were encouraged to take their wellness plan to their tutor for their fourth-year block clinical placement. This enabled the tutor to discuss and refer to aspects of mental health and wellness, managing stress and seeking professional help when required. Anecdotal feedback from tutors indicated they engaged in discussions about mental health and wellness and found this plan was a useful opening for meaningful discourse on sensitive topics that students might normally find difficult to raise. It also allowed students to raise issues indirectly and safely by discussing their wellness plan. The activities were continued with subsequent third-year cohorts.

DISCUSSION

This pilot project gathered student perceptions of a short and efficient program focusing on developing wellness and mindfulness in students. Students readily participated in the program and results showed they enjoyed and engaged with the opportunity to discuss wellness and engage in mindfulness activities. Few students (10%) had developed a wellness plan before the program and most (90%) reported planning to implement new strategies in the future. Despite being at the end of their third year at university, most learned new strategies to deal with procrastination, stress and distractions. Although mindfulness activities are currently popular, 50 per cent or less of the students had tried them previously and most reported they will consider using them again. Free text comments showed students found the activities helpful and practical for their everyday lives. Tutors also valued the wellness plan as a segue into discussing the management of mental health in a safe and supportive way. This program would be relatively easy to embed in allied health courses, as it is short and efficient.

Developing a wellness plan engaged students in self-care that is critically important to prevent the burnout that is common in healthcare professionals (Skovholt & Trotter-Mathison 2011). Developing self-care and engaging in mindfulness supports the development of self-compassion and compassion for others (Raab 2014; Sinclair et al. 2017). Therefore, these aspects should be an important component of any allied health professional's training.

LIMITATIONS

This was a small pilot project and so generalisation of findings is limited. Evaluating the program with increased numbers and disciplines would increase the validity of the results. There is no evaluation of the outcomes of the program on students' stress levels and mental health in fourth year. A pre- and post-standardised assessment would add weight to the findings.

It is acknowledged that student perceptions of which strategies they intend to undertake in the future is open to bias. This could be overcome by students selecting from and mapping to what previous students have successfully used in their practice.

WIDER APPLICATION

Wellness activities can be applied to any course but some consideration should be given to the professional context to maximise student participation and application. A wellness program has been embedded in an undergraduate paramedicine degree course to aid the students throughout their studies and encourage the creation of coping strategies for placements and ultimately their careers in a pre-hospital emergency setting. While the program has similar outcomes to that of speech pathology, different presentations and activities are used to align with the research around mental health and wellbeing of paramedics to encourage participation by the students, as they are more practically focused. Due to the nature of the course and the high rates of stress and mental health issues experienced by first responders (Beyond Blue 2018), these activities are linked to several units across the course and focus on self-care and support of others in the context of university, clinical placements and the profession. Mindfulness activities are introduced in first year of first semester and are linked to promoting discussion, openness and reducing the stigma of mental health within the community and profession. Discussion and activities are initially focused around coping with study and the academic journey. Topics include planning study, procrastination, self-care and awareness, with mindfulness and stress reduction activities embedded as specific generic topics as opposed to being stand-alone topics. This then builds over the course and is linked to own, colleague and patient mental health and wellbeing, support seeking, coping strategies and assisting others, including having difficult conversations within the context of paramedicine. These activities help to reduce mental health stigma and it is hoped that mental health patient care will improve as a result of education, understanding and a more empathetic approach.

CONCLUSION

As millennial allied health students face a number of challenges to their mental health and wellness, an embedded wellness program with mindfulness activities is recommended. This pilot project showed a short intervention can be added to tutorials relatively easily and provide students strategies and support to manage their own mental

health and wellness at university and throughout their career. It has also been demonstrated that inclusion in another quite different allied health course, in this case paramedicine, is possible through knowledge of the issues specific to the area and careful consideration and adaptation of activities. There is further scope for a broader range of allied health professions, such as occupational therapy, dietetics and beyond.

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APPENDIX

HEALTH AND WELLNESS QUESTIONNAIRE

This semester we have explored health and wellness, mindfulness activities and the development of a health and wellness plan for fourth year. Please complete these questions to give your feedback for quality assurance purposes.

Did you have a health and wellness plan (either formal or informal) before the start of this semester? Yes/No

Did you consider these things to be part of your health and wellness before the start of this semester?

- Emotional wellness Yes/No
- Physical wellness Yes/No
- Social wellness Yes/No
- Environmental wellness Yes/No
- Occupational wellness Yes/No
- Spiritual wellness Yes/No
- Intellectual wellness Yes/No

Had you tried or regularly used any of these mindfulness strategies before the start of this semester?

- Silent meditation focus on breathing Yes/No
- Three big sighs for stress reduction Yes/No
- Guided meditation/relaxation Yes/No
- Mindful eating Yes/No
- Keeping a journal Yes/No
- Bush walk/mindful walking Yes/No
- Gratitude journal Yes/No
- Labyrinth Yes/No

Did you enjoy trying/using these strategies? Yes/No

Would you use them again in your life? Yes/No

Prior to the start of this semester have you implemented strategies to manage:

- Procrastination Yes/No
- Stress Yes/No
- Distractions Yes/No

During the semester did you find new strategies to deal with these? Yes/No

Did you find the discussion of a Health and Wellness plan useful? Yes/No

Will you be implementing new strategies to manage your Health and Wellness now? Yes/No

Any other comments/feedback? (free text)