



Bryant University

HONORS THESIS

What About Them? The Health and Well-being of Those Who Care for Others

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ABSTRACT

Employee Health and Wellness Programs are increasingly more prevalent in different work environments and industries. Studies have shown that these programs can potentially increase employee productivity and reduce absenteeism, in addition to emphasizing a priority on mental and physical wellness. Healthcare workers already have a stressful job, but since the breakout of COVID-19, they have been overwhelmed with this pandemic to an even higher degree. It is important that healthcare workers take care of their own health and wellness and that it is prioritized at their place of work. Through surveying various healthcare workers, this study investigates if healthcare professionals are provided with employee well-being options or programs and whether it has an effect on their own well-being. The conclusions of the study indicate that healthcare workers have lower general-well-being than recommended standards, that healthcare workers are unaware of wellness programs or initiatives at their place of work, and that most healthcare employers do not offer sufficient wellness programs. The recommendations collected from healthcare employees about what they would like out of a wellness program allow for further studies to analyze the implementation of such initiatives and any potential changes in the well-being of healthcare workers as a result.

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INTRODUCTION

Healthcare providers prioritize patient health and well-being, treating mental and physical conditions with the utmost care to ensure the patient recovers. But do healthcare providers truly value what they preach – do they hold the same level of concern for their own employees mental and physical health? Most healthcare workers find themselves in stressful situations daily as they treat patients. They are exposed to trauma, angst, and many more difficult emotions, all while enduring very long shifts. This can lead to stress, lack of sleep, and poor health and wellness of the healthcare workers. Since the outbreak of COVID-19, the demand on healthcare workers has increased. Healthcare workers are now exposed to additional stressors including the risk of infection, social isolation, and economic consequences. It is estimated that burnout is more than 40% with frontline healthcare providers with the highest rate, and that stress scores have increased significantly (Burnout of Healthcare Providers during COVID-19, 2020). In the United States, there are approximately four million nurses (Carson-Newman University Online, 2020), and over one million doctors (American Medical Association; US Department of Health and Human Services, 2015). As of 2018, over 75% of physicians have indicated feelings of burnout (The Physicians Foundation, 2018). The top two reasons for burnout are indicated to be spending too many hours at work and too many bureaucratic tasks (Medscape, 2020). 15.6% of nurses, 20% of ER nurses, and 41% of unengaged nurses have reported feelings of burnout but have also indicated that they do not plan to leave their place of work (Brusie, 2019). The top reasons include autonomy, nurse-to-nurse teamwork, staffing/resources, relationships, and leadership access (Brusie, 2019). Many companies in a variety of industries have adopted wellness programs to lower absenteeism (prolonged absence) and to improve productivity (quality and effectiveness of effort). It is imperative that the healthcare industry takes steps to prioritize employee wellness and provide a myriad of initiatives to combat the negative effects of the increasingly extreme responsibility healthcare workers' bear.

Currently, healthcare providers lag other industries in providing employee care. A study of healthcare providers found that there were no properly implemented programs that assisted healthcare workers in their mental and physical health (Burnout of Healthcare Providers during COVID-19, 2020). Preventing burnout is a two-step process. To be successful the

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institution must acknowledge it and have interventions, and the employees must take advantage. Research has shown that mindfulness, exercise programs, stress-management training, and small group programs help healthcare workers. Additionally, organizational strategies that prioritize the mental health of healthcare workers can prevent burnout as well. (Burnout of Healthcare Providers during COVID-19, 2020) The purpose of this study is to highlight the pressing need of employee well-being initiatives for healthcare workers. The effectiveness of existing wellness programs and initiatives of current healthcare providers are falling short of the needs of health-care workers. It is important that healthcare workers' physical and mental health is prioritized, and sufficient programs are put in place to ensure employee well-being.

LITERATURE REVIEW

Nurses are healthcare professionals that work in a multitude of settings and specialties including hospitals, nursing homes, occupational health, and more. According to the American Nursing Association, strains that nurses endure (including the balance between work and family life, long shifts, disrupted sleep cycle) has been linked to nurses developing breast cancer, depression, diabetes, heart disease, infections from blood-borne pathogens, musculoskeletal injuries, strokes, tuberculosis, and workplace allergies. Work as a Nurse can be very traumatic, and in the actual American Nurses Association Code of Ethics, it says that you must care for yourself as a nurse. However, the priority of employee care is not always encouraged by employers (hospitals). When surveyed by the American Nurses Association 68% of nurses say that they put the overall well-being (health, safety, and wellness) of their patients above their own. However, "...nurses give the best care to patients when they are operating at their own peak wellness." (American Nurses Association). Not only will mental and physical wellness benefit nurses, but it will also benefit their patients in the long run as well.

A study was done at Inova Loudoun Hospital in Leesburg, Virginia to "expose nurses to aspects of healthier lifestyle, with a primary focus on the balance of exercise and nutrition." (Speroni, 2014) The program was created with the intention of educating nurses about a healthy balance between exercise and nutrition to achieve a normal weight. There were 217

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nurse participants, with one control group receiving no intervention. The program included twelve weekly exercise sessions, four monthly yoga sessions, four nutrition sessions, and weekly healthy lifestyle reviews. Through research for this program, Nurses Living Fit, it was found that nurses wanted personalized exercise, nutrition education, and year-round programs. For nurses with limited mobility or other disabilities, seated exercise programs were encouraged. The nutrition program included a partnership with the hospital RDs with lectures on basic food nutrition, portions, food purchases, healthy cooking, etc. This pilot program involved other members from the hospital and community for large annual events such as walks and runs that may have helped increase engagement from events. For those who participated in these events, free blood pressure, BMI (body mass index which is a value derived from the height and weight of the individual), and glucose screenings were given as well as personalized recommendations. During lunch sessions, chefs would be there to cook health options as demonstrations which also incorporates the nutrition goal of the program. The general recommendation from this study was for facilities that employ nurses to start with a 12-week session with one or two hours per week since the schedule of a nurse is very intense and strained, only one or two hours a week outside of work can be manageable. The program did not measure specific outcomes and relied on activities to take place outside of work hours or during lunch breaks. It is advised to focus on cardiovascular and strength training as well as stretching. A physical therapist or trainer can develop and lead exercise sessions. Additionally, core strength is vital for nurses so teaching participants to engage their core during usual activities such as when sitting, driving, standing, etc. can build muscle and avoid back injury. Healthcare workers should have a forum to make their personal health concerns known and wellness programs should be designed around these concerns to maintain employee health and fitness. Additionally, the American Nurses Association advises individual steps nurses can take to improve workplace health for the consideration of their employer: Self-Reflection/Assessment, Identifying Opportunities for Growth, and efforts to improve Physical, Mental, Spiritual, Relationships, Economic, Psychological wellness.

Pediatric Oncology Nurses have some of the most difficult jobs in the healthcare industry. They work directly with children diagnosed with cancer and as a result experience a considerable amount of stress and grief. Alongside these mental strains, they have heavy

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workloads, staff shortages, poor working conditions, and sometimes a lack of resources. Additionally, the nurses can develop a strong attachment to their patients and the families, so when a treatment becomes ineffective, grief can take over and effect energy, sleep patterns, and appetite. The combination of these factors can put Pediatric Oncology Nurses at risk for emotional exhaustion (Zadeh, Gamba, Hudson, Wiener, 2012). Prior to implementing wellness programs at the hospital in the study, nurses gave suggestions via a suggestion box. The first series of the program was implemented twice a day in morning and evening. The second series was held in the inpatient unit and outpatient clinic. The sessions included a verbal educational, a hand-on activity and interactive discussion, reading materials, as well as questions. At the conclusion of each session, the nurse participants gave an evaluation. These evaluations showed that the majority believed that the sessions provided new information that would enhance their work abilities and skills. Another study examined a nurse building a wellness program and the perspective that come from it. It was found that a “buy in” as well as support of company management was necessary for the success of the program. In the pitching process, it was marketed as low cost as well as no interruption of the workday as employees would attend program components after hours. With support of management, engagement may be higher, and there may be more incentives. Regardless of the specificity of the nurse’s department, strong mental and physical wellness can increase productivity and quality of care provided to patients. There have been no clear reports indicating whether employee wellness programs for nurses will reduce absenteeism, which has been shown to be reduced through other employee wellness programs in various industries.

Like nurses, physicians experience burnout. Burnout is defined as “a triad of emotional exhaustion, depersonalization, and low sense of personal accomplishment.” (Schwartz, Shanafelt, Gimmler, Osterberg, 2020) Unlike civilian physicians, U.S. Army physicians need to maintain their physical strength as a requirement to serve in the military. In 2013, the U.S. Army Surgeon General implemented the Performance Triad (P3), which is an initiative to improve health-related behaviors of soldiers in the U.S. Army. There are three components of P3, including sleep, physical activity, and nutrition. In 2015, a survey was sent out to all active-duty U.S. Army physicians to P3. It asked questions about obtaining eight hours of sleep per day, trainings done per week, being caffeine free six hours before bed, eating eight

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servings of fruits and veggies per day, and getting 15,000 steps per day. Of those that responded to the survey, “25% of respondents were adherent to the sleep tenet, 45% to the exercise tenet, and 38% to the nutrition tenet.” As consistent with the military culture, U.S. Army physicians prioritized exercise over sleep. It appears wellness behaviors were affected by work hours. Those that worked fewer hours, are more likely to obtain eight hours of sleep per day (and regular exercise).

In the discussion of this analysis, it was believed that there is a strong association between the three triads and the supervisor’s belief. Creating a culture that promotes physician wellness from the top down is crucial for it to succeed. Because of the physical fitness assessment requirement for those in the armed services, there is the incentive to maintain adequate exercise. The sleep deprivation can also be linked to the culture of physicians as mentioned above, that working sleep deprived is a positive characteristic, or that you look weak if you complain about being burned out, even though that can lead to medical errors. For the nutrition aspect, physicians may skip meals to keep up with work, and the meals they do eat from the cafeteria are often not healthy options and are high in calories. Poor nutrition is known to have physical, emotion, and cognitive effects. There were additional studies which found that physicians who exercised and practiced good nutrition habits were more likely to pass those positive habits on through counseling to their patients, which aligns with the statement from the American Nursing Association about how strong nurse wellness reflects the care given to their patients.

A different study discussed physician burnout and the need for support. A peer support group was created where physicians spoke of the factors that affect their wellness. The study included two consecutive 9-month groups, the first with no curriculum, the second with content developed from the first group’s feedback. Finally, an evaluation with participants was done at the end of each group program. Participants discussed that the de-stigmatizing aspect was very helpful and to know that others were going through the same thing. A lot of what was spoken about was being seen in a vulnerable state when you need help or do not know how to solve a problem, which ties back to the physician culture. Physicians that do not serve in the U.S. Army do not have the same requirement to maintain their positions in terms

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of a physical fitness level. As a result, physical wellness (in addition to emotional wellness) may not be a priority. When healthcare workers take note of their emotional lives, it allows them to remain healthy themselves. As a result, research has indicated that when healthcare workers are aware of their wellness, there is a higher trust amongst patients, higher patient satisfaction, and less physician burnout. (Fessell, Goleman, 2020)

Similar to the steps provided by the American Nurses Association, there are four pillars in which healthcare workers can reflect upon to improve their overall wellness: Self-awareness (“tuning into our emotions and how they impact our performance”), Self-management (“regulating our emotions”), Social awareness (“turning into others emotions”) and Social management (“effectiveness in our interactions and influencing other”). (Fessell, Goleman, 2020) Despite these recommendations, many places of work struggle with how to help physicians improve their overall well-being and decrease physician burnout and stress. Life Bridge, a third-party physician wellness program, funded by the Physicians Foundation, is a step by-step guide to implementing and developing a wellness program. It addresses three factors in which physicians can develop due to their job: burnout, stress, and suicidal thoughts. It is one of the few third-party options that hospitals can adopt without divulging a lot of resources into a program that may or may not address the target issues. It is evident that nurses and physicians experience high levels of burnout, and due to the cultural stigma of looking weak, may not seek out the wellness help they need. Very few places of work for healthcare workers provide wellness programs or initiatives for their employees. As indicated by having management be on board and initiate a focus on wellness will allow for a program to flourish, especially with the culture of physicians. There appears to be more data and studies done for nurses over physicians, potentially indicating that there are more opportunities in nursing departments over other healthcare professions, although there is not enough evidence to fully back up this conclusion.

Lastly, a component that could affect an individual’s overall health is their own judgement about their overall well-being (subjective well-being). A study conducted in Nigeria investigated the relationship between aspects of subjective well-being (Happiness, satisfaction with life, psychological well-being, emotional well-being, and social well-being) and the Big

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5 Personality Traits (Extraversion, Conscientiousness, Neuroticism, Agreeableness, and Openness). (Abdullahi, Orji, Rabi, Kawu, 2020) Results indicated: "...people high in Extraversion are weakly associated with Psychological well-being...people high in Conscientiousness are weakly positively associated with Emotional well-being and Psychological well-being and have no significant association with Social well-being... people low in Neuroticism are strongly negatively associated with Emotional and Psychological well-being...Openness is and does not have a significant association with Satisfaction with life...Agreeableness is weakly positively associated with Social well-being, Emotional well-being, Satisfaction with Life and Happiness."

This study indicates that if a wellness program is implemented to aid individuals, their personality traits could target specific components of their overall subjective well-being.

Healthcare workers have extremely demanding jobs and receive remarkably little support from their employers. A number of the referenced studies support the conclusion that programs headed by employers make significant positive changes in healthcare workers' lives. These programs are in the best interests of both the healthcare workers and employers as patient care improves with healthcare worker well-being. The industry is severely lacking in employee wellness programs and with rising level of demand on our healthcare workers it is time employers step up and prioritize the wellness of their workers.

HYPOTHESES

1. The general well-being of healthcare workers will be lower than the recommended standards encouraged by the Center for Disease Control and Prevention
2. Healthcare workers will be aware of wellness programs and/or initiatives at their place of work
3. Those that utilize workplace wellness programs will have better general well-being than those that do not.
4. Healthcare employers do not offer sufficient wellness programs.

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METHODOLOGY

The research was conducted via a survey. The physical and mental health questions of the survey were modeled after the Behavioral Risk Factor Surveillance System from the Center for Disease Control and Prevention. These questions are phrased in a neutral way as to not lead the respondent to a certain response. Additionally, a shortened version of the Big 5 Personality questionnaire was included to analyze if there was any correlation between an individual's personality type and their mental and physical well-being.

The survey was distributed through a convenience sample to healthcare workers at various hospitals and clinics. The goal of the survey was to collect the opinions and thoughts of healthcare professionals about their own mental and physical well-being, any current well-being programs and/or initiatives at their place of work and the effectiveness on their own mental and physical wellness, the implementation and efficiency of the programs and/or initiatives, and what they would want out of a wellness program was captured.

The survey was created through the Qualtrics platform in which the data was also stored and analyzed. Imbedded into the survey is a short 15-item Big Five Inventory Survey. This survey analyzes the dimensions of the respondent's personality based on the following five traits: Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. Each response to this questionnaire was coded through the program created by PsyToolkit (Lang, F. R., John, D., Ludtke, O., Schupp, J., & Wagner, G. G. (2011). Short assessment of the Big Five: robust across survey methods except telephone interviewing. *Behavior Research Methods*, 43, 548-567). The reason for imbedding this survey instead of the original Big 5 Personality test is due to the shortened questionnaire. It was assumed respondents would not continue the survey if it were longer and was estimated to take longer than seven minutes.

RESULTS

There were eighty-two responses collected from healthcare workers that came from various hospitals and clinics primarily in New England. The makeup of the population is seen below:

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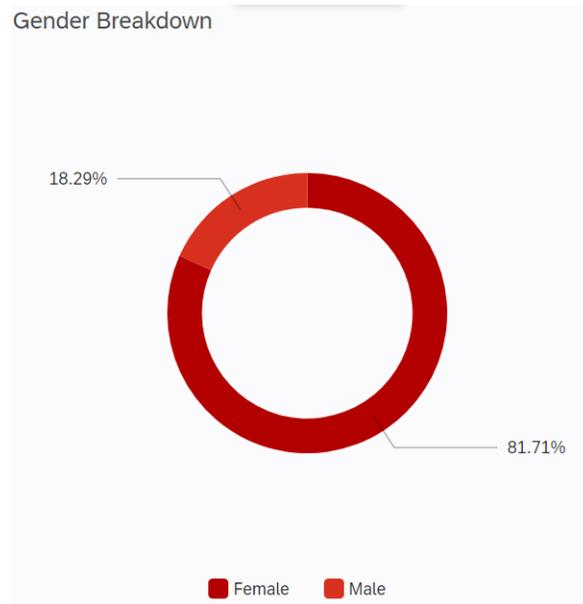


Figure 1 – Gender Breakdown

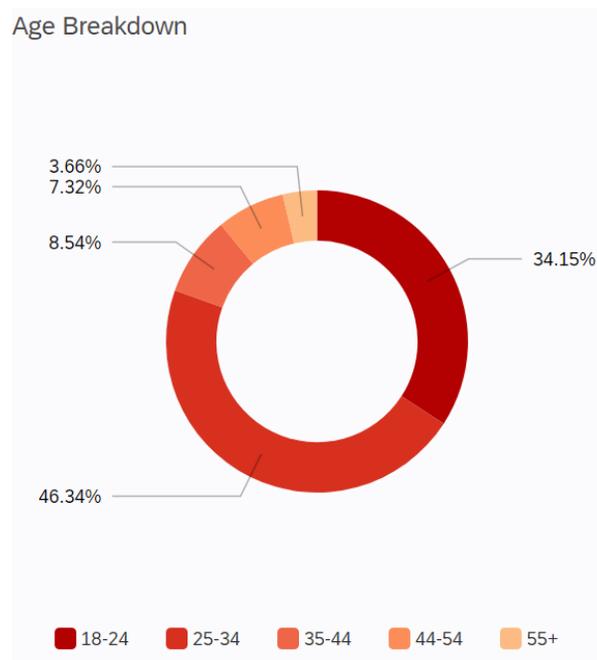


Figure 2 – Age Breakdown

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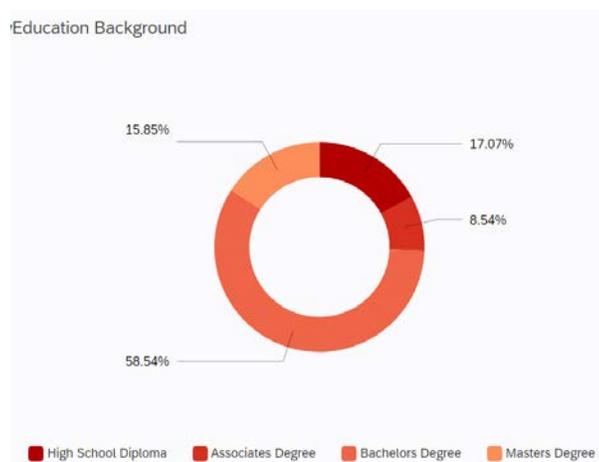


Figure 3 – Education Background

The respondents are heavily female and between the ages of 18-34. This difference in gender discrepancy may be related to several factors. First, according to the United States Census, women hold 76% of healthcare jobs. (Cheeseman, Christnacht 2019) This is a potential reason for the lower number of males responding to questions. Additionally, according to research published in the National Library of Medicine, it was concluded that women are more likely to participate in surveys than men. (Curtin et al., 2000; Singer et al., 2000) According to KFF, a Health Policy Analysis organization, only 35% of healthcare workers are below the age of thirty-five. (Artiga, Claxton, Garfield, Rae, 2021) Although this age group was the majority of the survey respondents, they are not the majority of healthcare workers. A potential reason for this was through the convenience sample many of the participants fell into this age group or had peers in this age group that took the survey which was a limitation of the study.

Participants were first asked to rate their overall general health. Once doing so, they were asked to rate their physical health and mental health on an individual basis. First, the results will focus on the fifty respondents (61%) that indicated their general health was either “Excellent” or “Very Good.” Out of these fifty respondents, 96% indicated that their physical health was not good only for 0-5 days of the past 30 days (Figure 4) and 46% said their mental health was not good for only 0-5 days of the past 30 days (Figure 5). This brings up a question if respondents did not consider their mental health when answering the initial

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question about their overall general health. Perhaps if the general health question came after the physical and mental health questions, the responses would have been different.

The Physical Health Rating of Respondents that Indicated "Excellent" or "Very Good" General Health

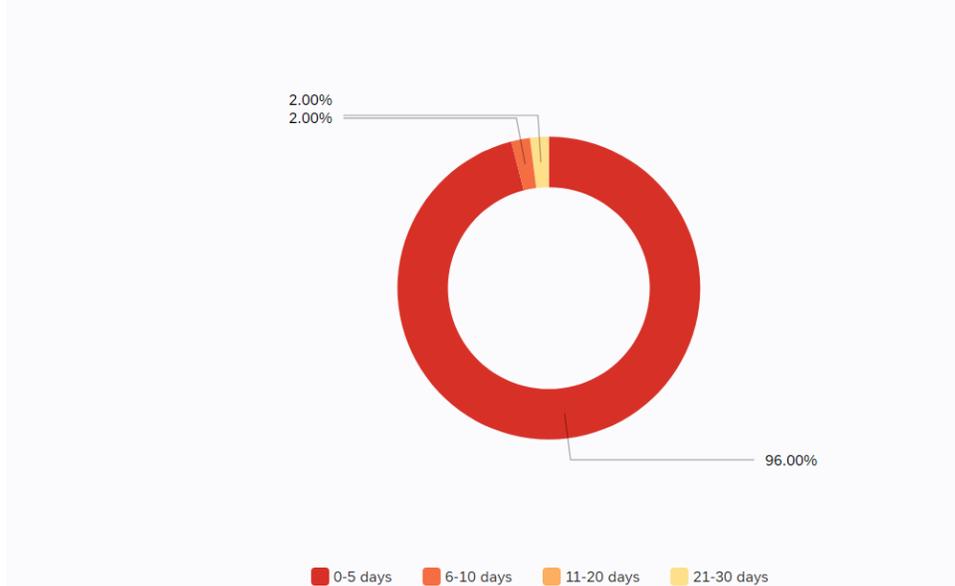


Figure 4 – Physical Health Rating: “Excellent” or “Very Good” General Health

The Mental Health Rating of Respondents that Indicated "Excellent" or "Very Good" General Health

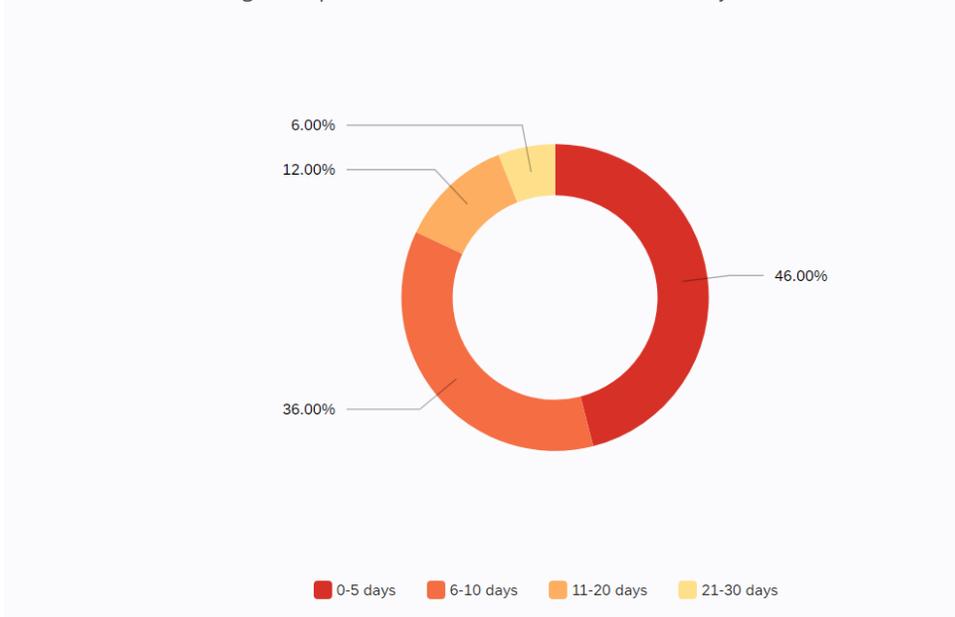


Figure 5 – Mental Health Rating: “Excellent” or “Very Good” General Health

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Figure 6 shows the breakdown of the fifty respondents and their indication of how frequently poor mental or physical health kept them from doing their usual activities in the last 30 days

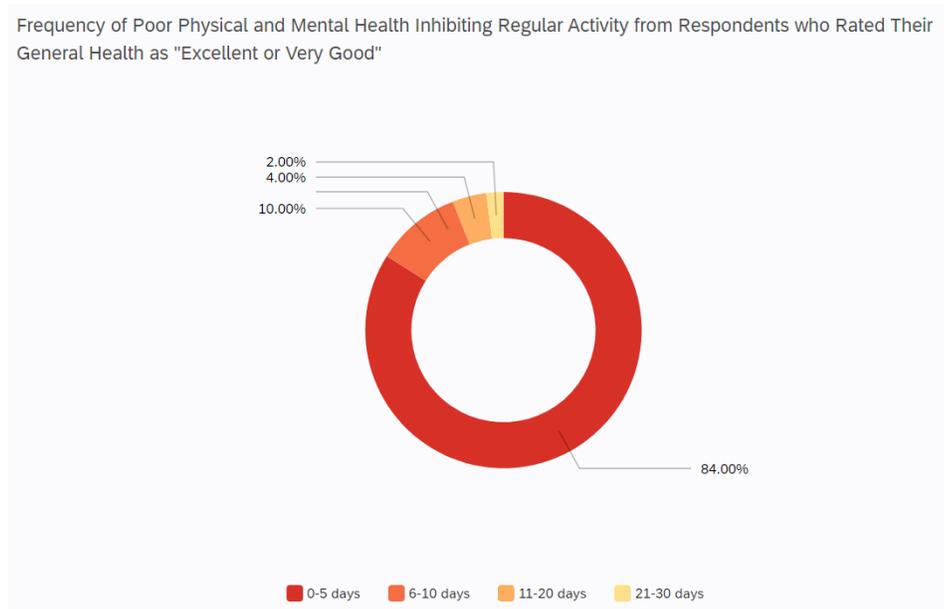


Figure 6 – Frequency Poor Physical/Mental Health Inhibited Regular Activity: “Excellent” or “Very Good” General Health

94% of the fifty respondents reported getting more than 6 hours of sleep each night in the past 30 days and 98% reported not smoking at all in the past 30 days.

Figure 7 shows the breakdown of the fifty respondents and their frequency in participating in physical activities outside of their regular job in the last 30 days.

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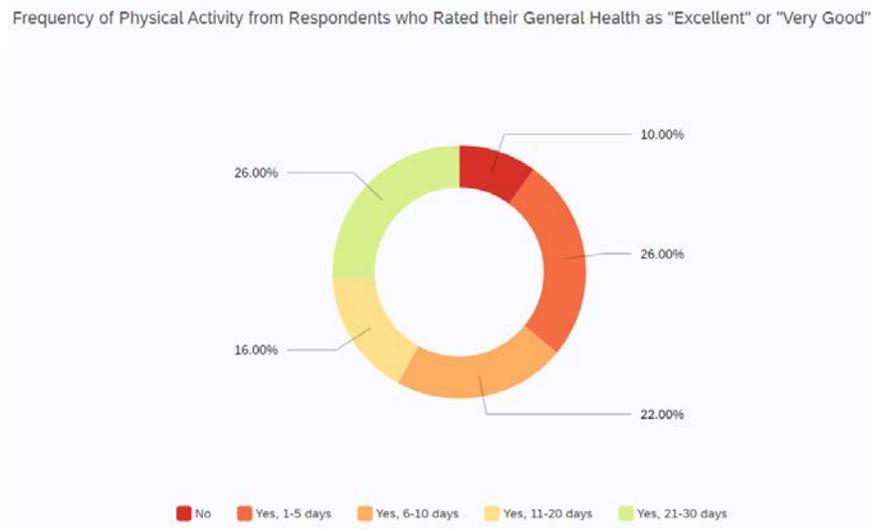


Figure 7 – Frequency of Physical Activity: “Excellent” or “Very Good” General Health

Figure 8 shows the breakdown of the 45/50 respondents that participated in some type of physical activity in the last 30 days and for how long they took part in the activity.

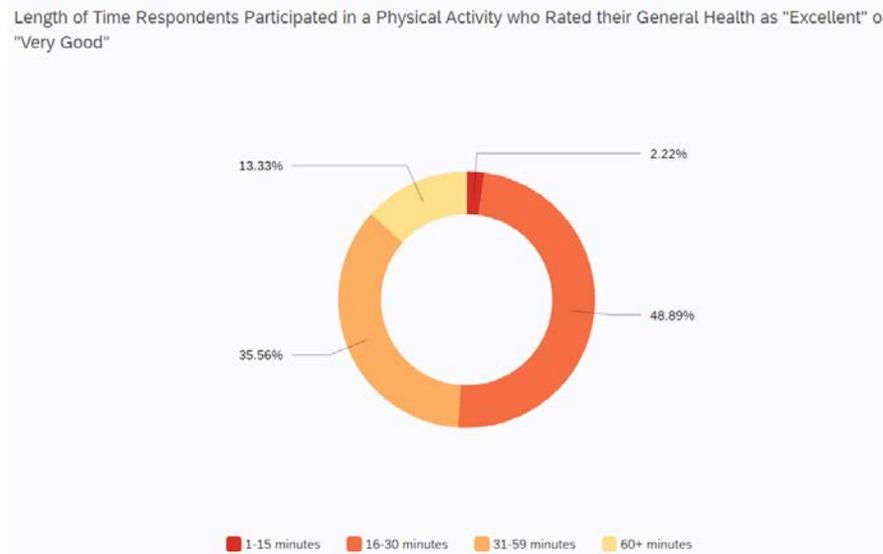


Figure 8 – Length of Time Participating in Physical Activity: “Excellent” or “Very Good” General Health

Figure 9 shows the breakdown of the fifty respondents and how often they ate fruits in the last 30 days.

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Frequency of Fruits Consumed from Respondents who Rated their General Health as "Excellent" or "Very Good"

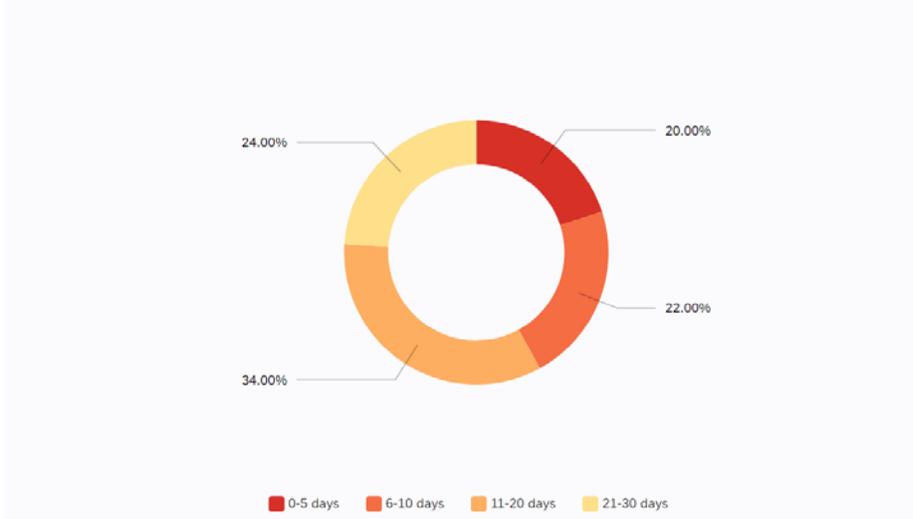


Figure 9 – Frequency of Fruits Consumed: “Excellent” or “Very Good” General Health

Figure 10 shows the breakdown of the fifty respondents and how often they ate a green leafy or lettuce salad with or without other vegetables in the last 30 days. Figure 11 shows the breakdown of the fifty respondents and how often they ate eating other vegetables, not including lettuce salads or potatoes.

Frequency of Green Leafy/Lettuce Salad with or without Other Vegetables Consumed from Respondents who Rated their General Health as "Excellent" or "Very Good"

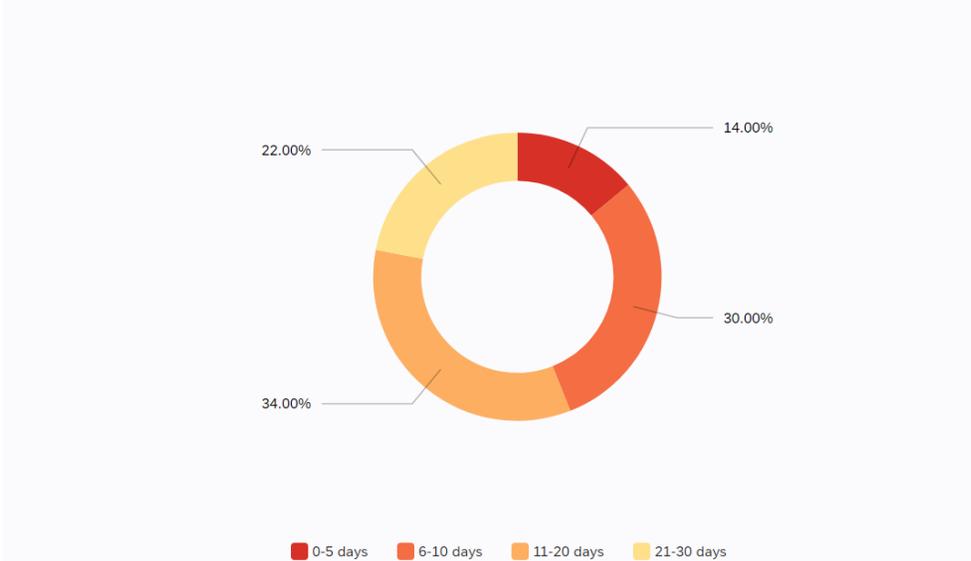


Figure 10 – Frequency of Green Leafy/Lettuce Salad with or Without Other Vegetables Consumed: “Excellent” or “Very Good” General Health

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Frequency of Vegetables Consumed (Not Including Lettuce Salads or Potatoes) from Respondents who Rated their General Health as "Excellent" or "Very Good"

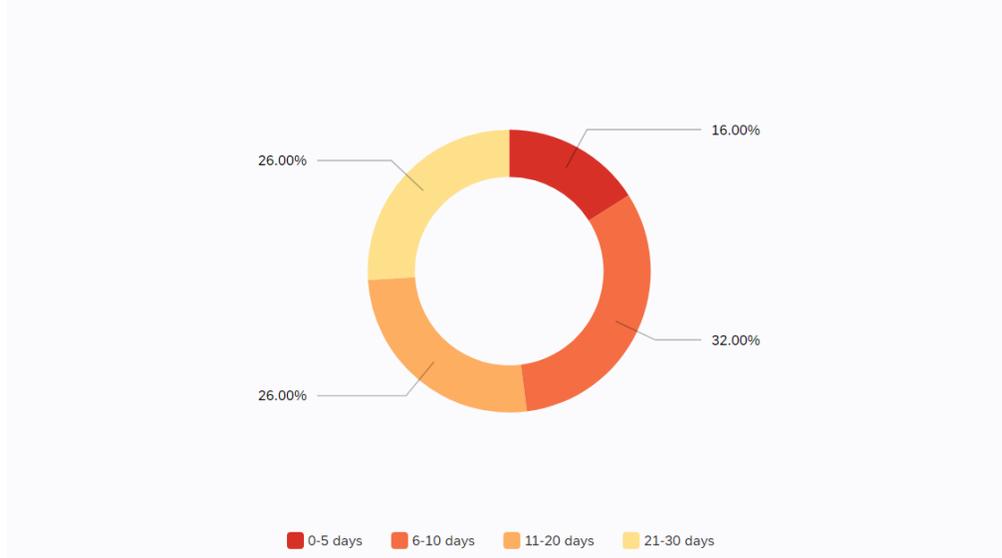


Figure 11 – Frequency of Vegetables Consumed (Not Including Lettuce Salads or Potatoes): “Excellent” or “Very Good” General Health

The remainder of the thirty-two respondents (39%) indicated that their general health was either “Good” or “Fair.” No respondents indicated having “Poor” general health. Out of these thirty-two respondents, 68% indicated that their physical health was not good only for 0-5 days of the past 30 days (Figure 12) and 28% said their mental health was not good for only 0-5 days of the past 30 days (Figure 13).

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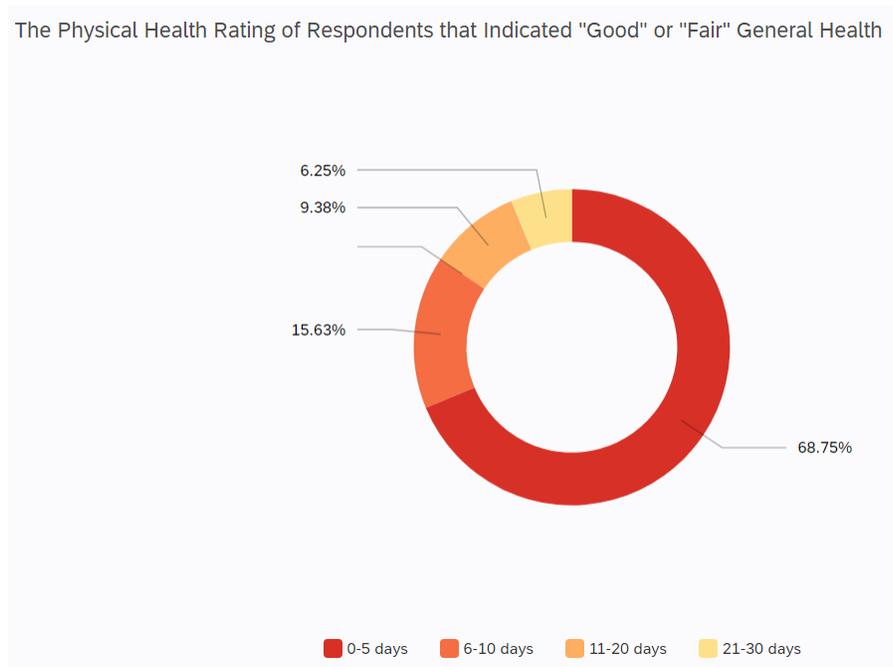


Figure 12 – Physical Health Rating: “Good” or “Fair” General Health

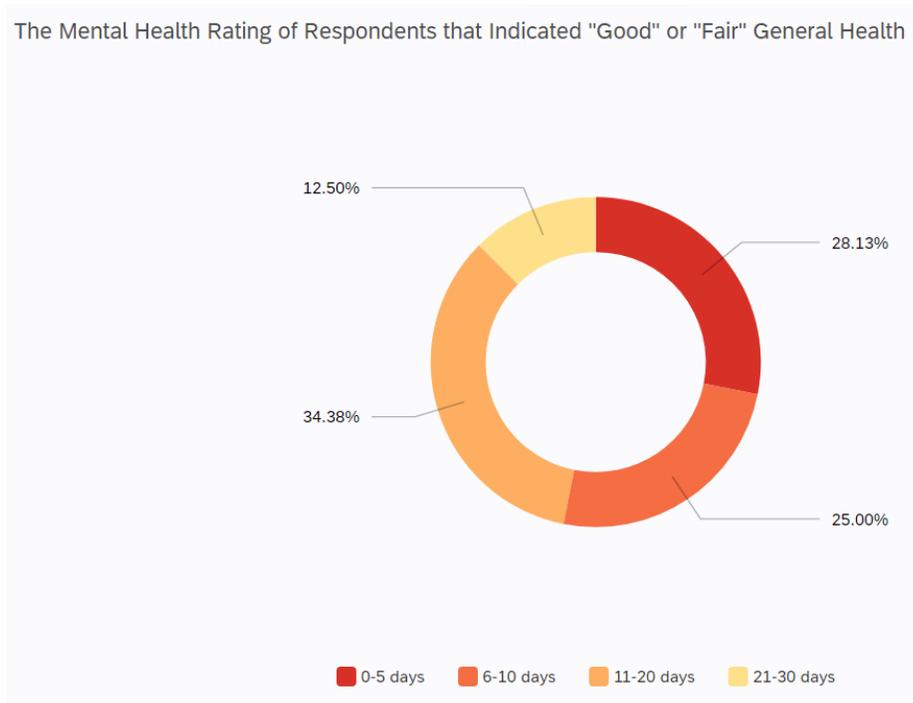


Figure 13 – Mental Health Rating: “Good” or “Fair” General Health

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Figure 14 shows the breakdown of the thirty-two respondents and their respondents and their indication of how frequently poor mental or physical health kept them from doing their usual activities in the last 30 days.

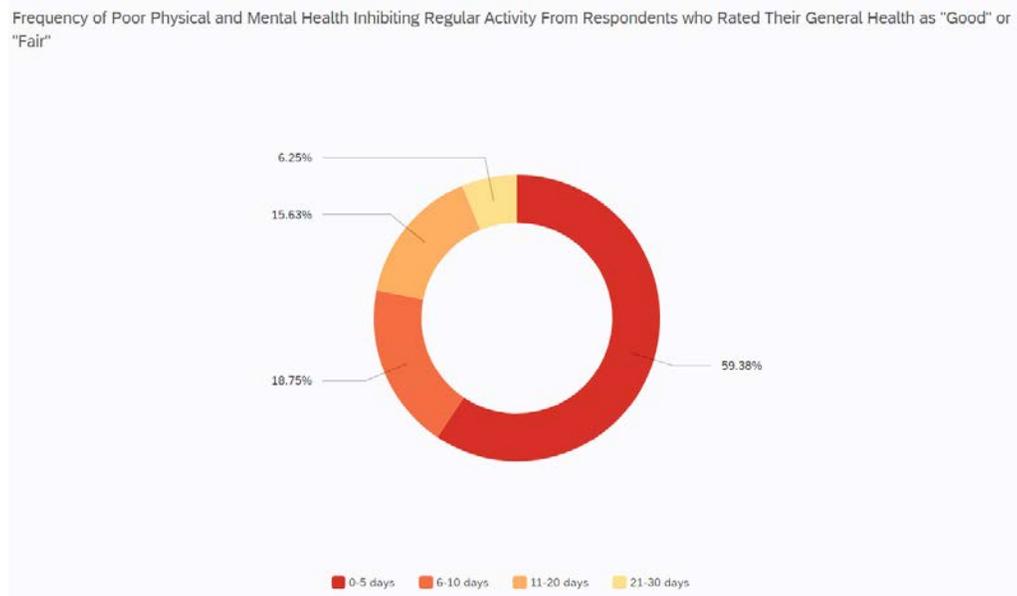


Figure 14 – Frequency Poor Physical/Mental Health Inhibited Regular Activity: “Good” or “Fair” General Health

90% of the thirty-two respondents reported getting more than 6 hours of sleep each night in the past 30 days and 87.5% reported not smoking at all in the past 30 days.

Figure 15 shows the breakdown of the thirty-two respondents and their frequency in participating in physical activities outside of their regular job in the last 30 days.

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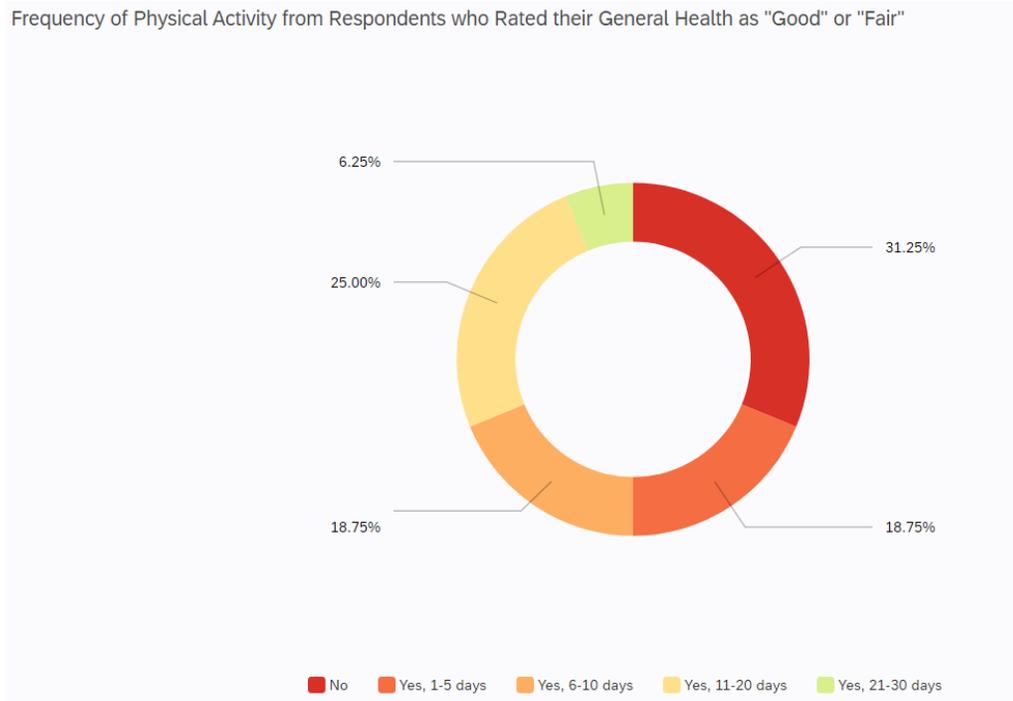


Figure 15 – Frequency of Physical Activity: “Good” or “Fair” General Health

Figure 16 shows the breakdown of the 22/32 respondents that participated in some type of physical activity in the last 30 days and for how long they took part in the activity.

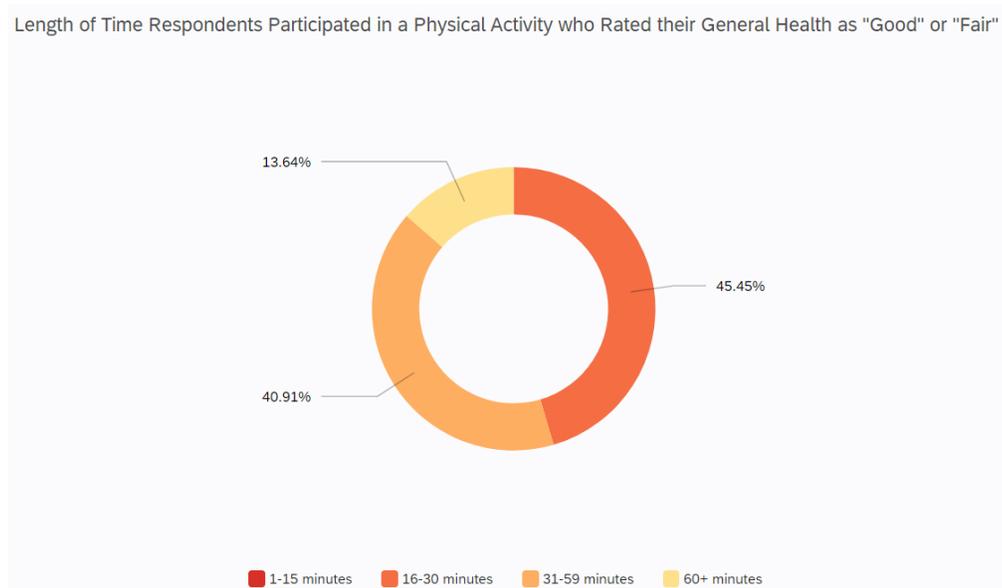


Figure 16 – Length of Time Participating in Physical Activity: “Good” or “Fair” General Health

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Figure 17 shows the breakdown of the thirty-two respondents and how often they ate fruits in the last 30 days

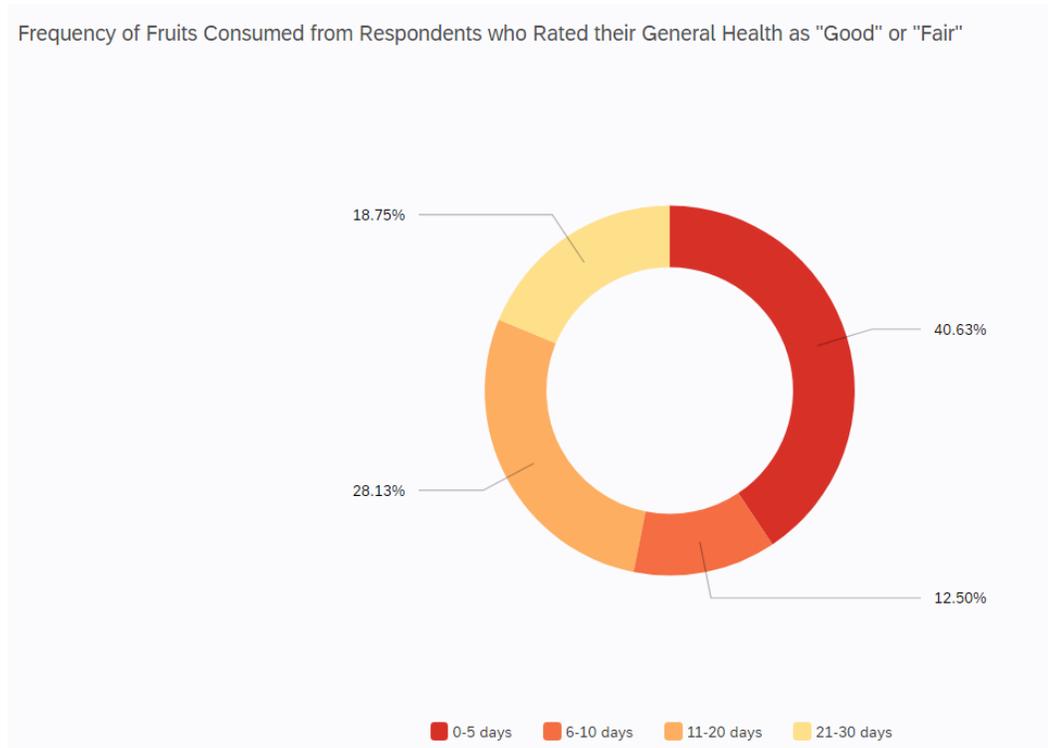


Figure 17 – Frequency of Fruits Consumed: “Good” or “Fair” General Health

Figure 18 shows the breakdown of the thirty-two respondents and how often they ate a green leafy or lettuce salad with or without other vegetables in the last 30 days and Figure 19 shows the breakdown of the 32 respondents and how often they ate eating other vegetables, not including lettuce salads or potatoes.

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Frequency of Green Leafy/Lettuce Salad with or without Other Vegetables Consumed from Respondents who Rated their General Health as "Good" or "Fair"

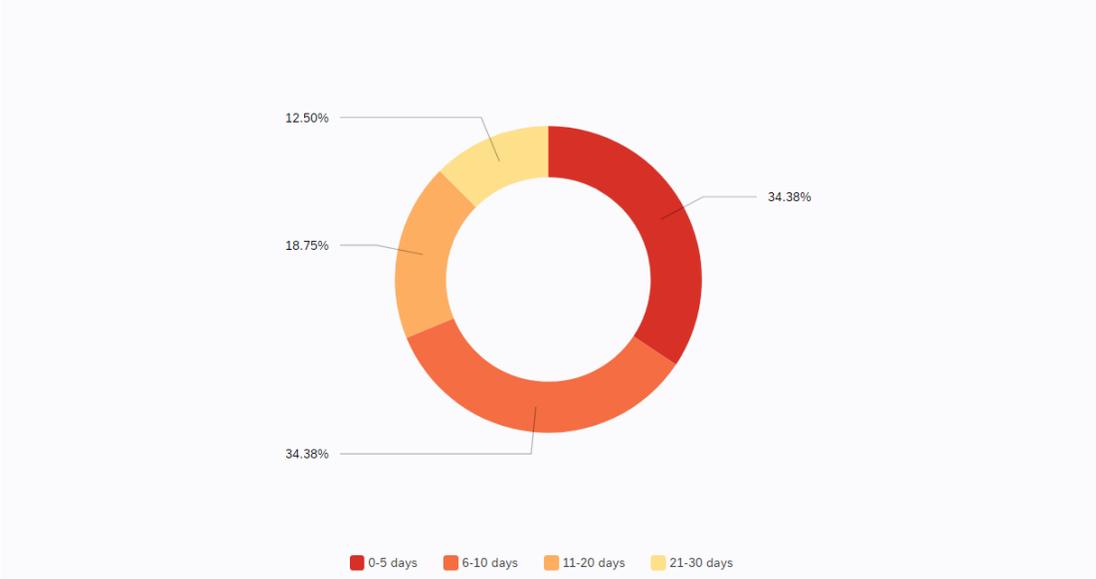


Figure 18 – Frequency of Green Leafy/Lettuce Salad with or Without Other Vegetables Consumed: “Good” or “Fair” General Health

Frequency of Vegetables Consumed (Not Including Lettuce Salads or Potatoes) from Respondents who Rated their General Health as "Good" or "Fair"

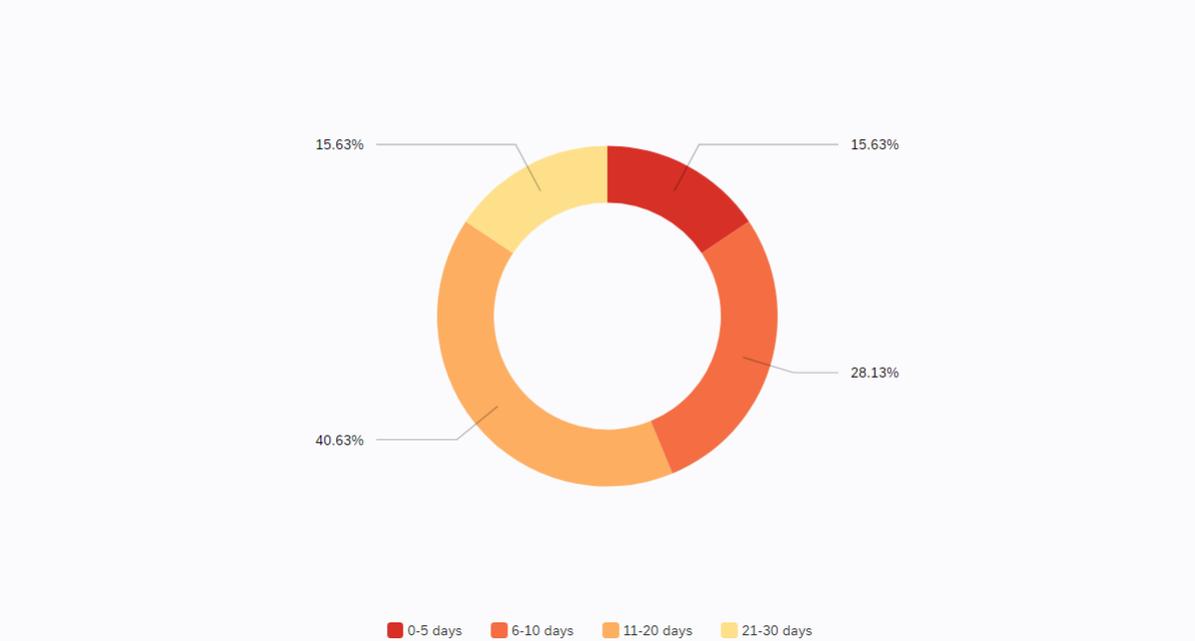


Figure 19 – Frequency of Vegetables Consumed (Not Including Lettuce Salads or Potatoes): “Good” or “Fair” General Health

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The next part of the survey included fifteen questions from the short version of the Big 5 Personality Quiz that scored each respondent based on the previously mentioned five traits. The rating of each personality trait is on a scale of 0-7. The analysis of the personality traits was made in comparison to the mental well-being measured by the respondents. 37.8% of respondents indicated that their mental health was not good for 0-5 days in the last 30 days, the “best” mental health score they could give. For these respondents, Conscientiousness and Agreeableness were the highest scoring personality traits and Neuroticism was the lowest scoring personality trait. Note that the below percentages do not equal 100% because some traits were tied for highest points

- Highest Scoring Traits
 - 48.3% Conscientiousness
 - 45.15% Agreeableness
 - 16.12% Openness
 - 9.6% Extraversion
 - 0% Neuroticism
- Lowest Scoring Traits
 - 70% Neuroticism
 - 25.8% Extraversion
 - 9.6% Openness
 - 3.2% Agreeableness
 - 0% Conscientiousness

31.7% of respondents indicated that their mental health was not good for 6-10 days in the last 30 days, the “second best” mental health score they could indicate. For these respondents, Agreeableness was the highest scoring personality trait and Neuroticism was the lowest scoring personality trait. Note that the below percentages do not equal 100% because some traits were tied for highest points

- Highest Scoring Traits
 - 50% Agreeableness
 - 26.9% Conscientiousness
 - 15.38% Extraversion
 - 15.38% Neuroticism

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- 7.69% Openness
- Lowest Scoring Traits
 - 53.8% Neuroticism
 - 38.4% Extraversion
 - 11.5% Openness
 - 7.69% Agreeableness
 - 3.84% Conscientiousness

19.5% of respondents indicated that their mental health was not good for 11-20 days in the last 30 days, the “third best” mental health score they could indicate. For these respondents, Agreeableness & Conscientiousness was the highest scoring personality trait and Extraversion was the lowest scoring personality trait. Note that the below percentages do not equal 100% because some traits were tied for highest points

- Highest Scoring Traits
 - 50% Agreeableness
 - 50% Conscientiousness
 - 25% Openness
 - 6.25% Extraversion
 - 6.25% Neuroticism
- Lowest Scoring Traits
 - 50% Extraversion
 - 18.75% Neuroticism
 - 18.75% Openness
 - 0% Conscientiousness
 - 0% Agreeableness

8.5% of respondents indicated that their mental health was not good for 21-30 days in the last 30 days, the “fourth best” mental health score they could indicate. For these respondents, Conscientiousness and Openness were the highest scoring personality traits and Extraversion was the lowest scoring personality trait. Note that the below percentages do not equal 100% because some traits were tied for highest points

- Highest Scoring Traits
 - 42.9% Openness

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- 42.9% Conscientiousness
- 28.6% Agreeableness
- 28.6% Neuroticism
- 0% Extraversion
- Lowest Scoring Traits
 - 71.4% Extraversion
 - 14.3% Openness
 - 14.3% Agreeableness
 - 14.4% Neuroticism
 - 0% Conscientiousness

The final portion of the survey asked respondents about their usage of any well-being programs or initiatives at their place of work and what they would want out of a wellness program. When asked if respondents utilize the wellness programs and/or initiatives at their place of work, Appendix A indicates responses organized based on the respondent's indication of their general health.

When asked if the respondent's places of work emphasized the importance of mental and physical wellness since the outbreak of the COVID-19 pandemic, seventy-seven healthcare workers responded with the results shown in Figure 20.

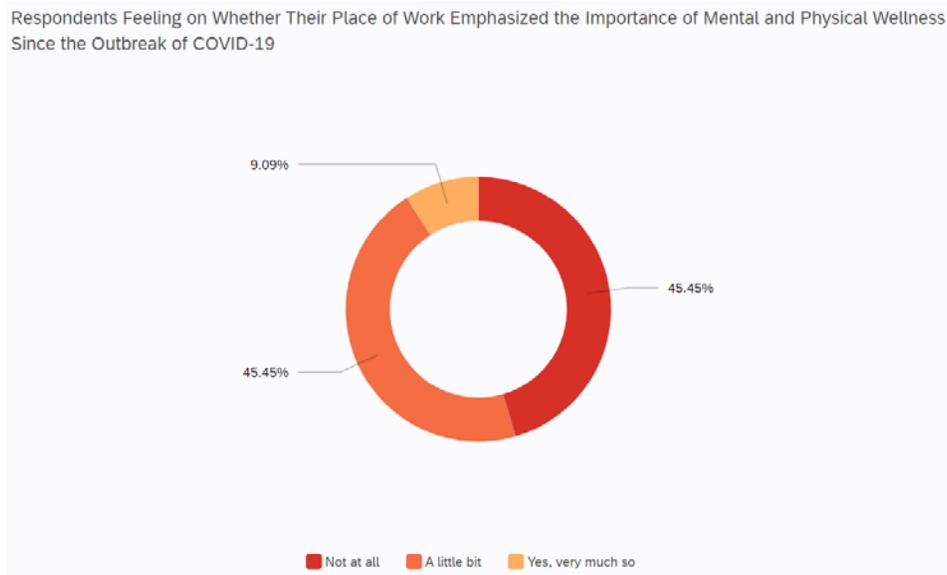


Figure 20 – Whether or Not Workplace Emphasized Importance of Mental and Physical Wellness Since the Outbreak of COVID-19

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When asked if the wellness programs sponsored by their workplace are valuable, seventy-seven healthcare workers responded with the results showed in Figure 21.

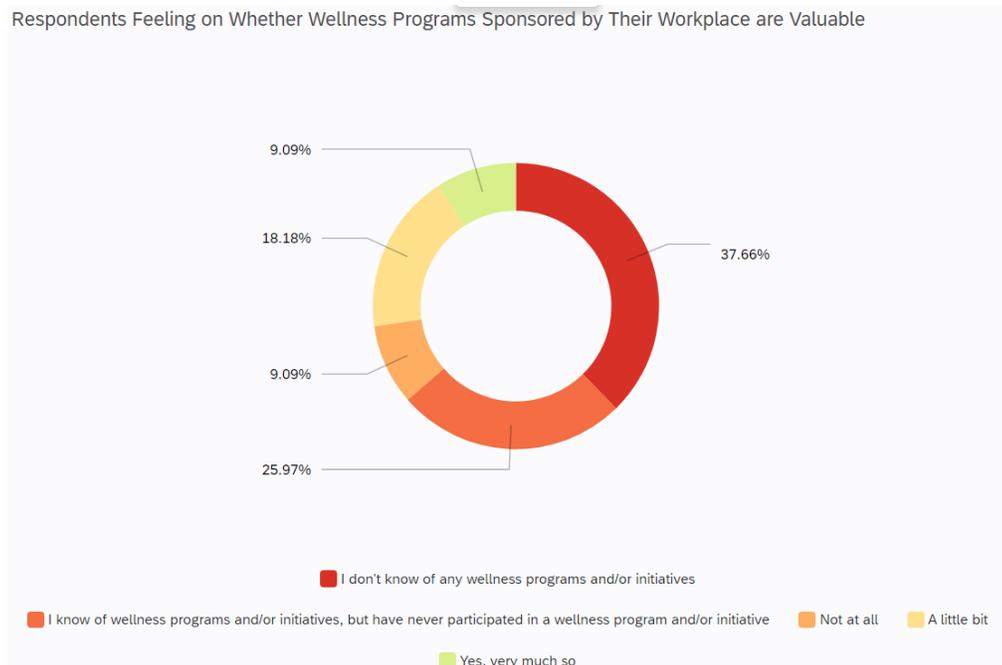


Figure 21 – Whether Wellness Programs Sponsored by Workplace are Valuable

When asked if respondents had utilized a workplace wellness program or initiative at their current place of work and if they noticed a change in their mental and/or physical wellness, seventy-four healthcare workers responded with the results showed in Figure 22.

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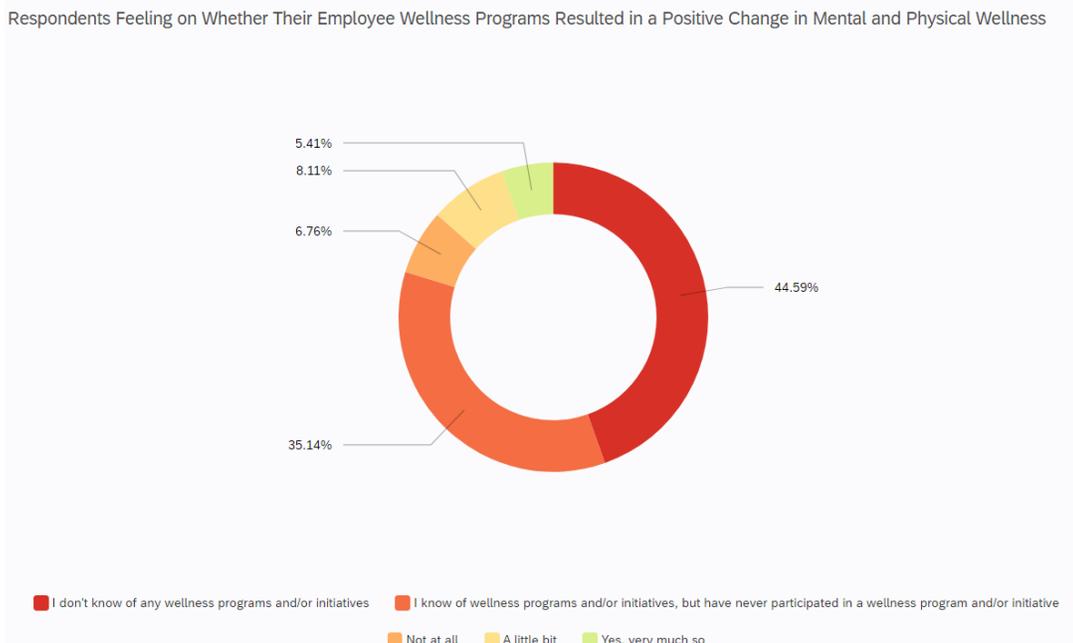


Figure 22 – Whether Their Employee Wellness Programs Resulted in Positive Change in Mental and Physical Wellness

The three final questions of the survey were open-ended responses. First, respondents indicated what they would want out of a wellness program, see responses in Appendix B. Second, respondents were asked for any additional comments that influence their mental and physical health, see responses in Appendix C. Third, respondents were asked what their organization could offer to enhance mental and physical well-being, see responses in Appendix D.

DISCUSSION

Results Comparison of What a Healthy Individual Is

In addition to discussing the results of the survey, it is important to have a comparison of what is deemed as a healthy person in relation to the survey respondents. This will be based on amount of sleep, physical activity, how many days a person eats fruits and vegetables, and if they smoke. The questions asked to respondents about the above topics were based off the Behavioral Risk Factor Surveillance System from the Center for Disease Control and Prevention (CDC), therefore their data and statistics will be used for comparison. The CDC states that adults ages 18+ need 7+ hours of sleep each night for the best health and well-

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being. There is a 6% drop in the number of respondents that reported getting a minimum of 6 hours of sleep each night from those that reported their general health to be “Excellent or “Very Good” to those that reported their general health to be “Good” or “Fair.”

The CDC categorizes physical activity as anything that gets an individual’s body moving. The recommended amount of physical activity adults ages 18+ should be getting each week is 150 minutes or roughly 30 minutes, five days a week. 92% of the participants with a general health rating of “Excellent” or “Very Good” participated in some type of physical activity in the past 30 days, and 93% of those respondents participated in the physical activity for at least 16-30 minutes each time or more. Holistically, some respondents are achieving the recommended goal. For example, 100% of the respondents that participated in physical activity for 11-20 or 21-30 days in the last 30 days, reached at least 16-30 minutes each time, placing them at the ideal goal (35% of all respondents achieved this).

The CDC recommends that adults should consume 1.5-2 cups of fruits and 2-3 cups of vegetables each day. Although respondents were not asked for the specific number of fruits and vegetables consumed in the last 30 days, they were asked how many days they consumed fruits or vegetables. The percentage breakdown for each category is explained above in the Results section, but when looking at respondents that consumed fruits and vegetables at least 21-30 days in the last 30 days were only 11% of respondents. Of the categories analyzed so far, fruit and vegetable intake are not up to par with CDC standards for adults.

Lastly, whether individuals smoke was analyzed. 94% of all respondents do not smoke.

Per the CDC, an ideal “healthy” individual would get at least 7 hours of sleep, exercise 150 minutes each week, eat 1.5-2 cups of fruits and 2-3 cups of vegetables each day, and not smoke. Based on the data collected, only 9.7% of respondents accomplish all categories. Of this population, 50% indicated that their mental health was not good for either 6-10 or 11-20 days in the past 30 days as well. 75% of these individuals either do not know of any wellness programs and/or initiatives at their place of work or they do not use them. 50% said their place of employment puts no emphasis on the importance of physical and mental wellness since the outbreak of the COVID-19 pandemic, and 38% indicated that their place of

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employment put only a little bit of emphasis on the importance of physical and mental wellness since the outbreak of the COVID-19 pandemic.

Of the eighty-two healthcare workers that completed the survey, a small minority were achieving the CDC recommended amounts for the categories mentioned above. Even with their healthy habits, their mental health self-rating did not match their physical health self-rating, and the majority indicated no use of or knowledge of wellness programs, and no or poor emphasis on mental and physical wellness by their place of employment. Only a small minority of healthcare workers are obtaining the physical health recommendations and they still do not achieve strong mental well-being or support from their place of work. This is a problem. Only 3.6% of respondents said that they sometimes utilize wellness programs and/or initiatives at their place of work *and* that their place of employment emphasized the importance of mental and physical wellness since the outbreak of the COVID-19 pandemic. 0% of the 3.6% of respondents were part of the “ideal healthy person” category.

5 Personality Traits

The 15-Item Big Five Inventory Survey analyzes the dimensions of the respondent’s personality based on the personality traits of Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. As previously discussed, an individual’s subjective well-being can affect their overall health; people high in Extraversion are weakly (positively) associated with psychological well-being, people high in Conscientiousness are weakly positively associated with psychological well-being, people low in Neuroticism are strongly negatively associated with Psychological well-being, Openness is weakly positively associated with Psychological well-being, and Agreeableness is associated with facets other than psychological well-being such as social well-being and emotional well-being. For the sake of continuity, psychological well-being will be the subjective well-being factor used for comparison. Individuals with strong Extraversion, Conscientiousness, and Openness traits may have stronger psychological well-being than individuals who score lower in those areas. Additionally, individuals with a strong Neuroticism trait may have lower psychological well-being than individuals who score lower in those areas.

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The four categories of mental well-being were based off respondents' indicating how many days during the past 30 days their mental health was not good: 1-5 days, 6-10 days, 11-20 days, or 21-30 days. The above order is ranked in terms of "best" to "fourth best" mental well-being self-ratings. In comparison to the above survey, mental well-being will be considered the same as psychological well-being. For the two "best" ratings of mental well-being (1-5 days and 6-10 days), the top three traits were Conscientiousness, Agreeableness, & Openness, and Agreeableness, Conscientiousness, & Extraversion. The lowest rated trait by a higher percentage for both groups was Neuroticism. A conclusive statement about the top three traits regarding a positive association with well-being cannot fully be made as there is slight inconsistency between the groups and the original study. Neuroticism is consistently negatively associated with psychological well-being. When looking at the third and fourth "best" ratings of mental well-being (11-20 days and 21-30 days) the top three traits were Conscientiousness, Agreeableness, & Openness for 11-20 days, and Conscientiousness & Openness were tied, and Agreeableness & Neuroticism were tied for 21-30 days. Lastly, Extraversion was found to be negatively associated with psychological well-being for the participants in the two groups.

All four groups indicated varying levels of mental well-being and the higher rated traits were consistent. This means not enough data is available to make a conclusive statement about the traits and any positive association. It did appear that those who reported a stronger mental well-being state were negatively associated with the Neuroticism trait, and those who reported a weaker mental well-being were negatively associated with the Extraversion trait. The latter contradicts the study in comparison.

Results of Employee Well-Being Programs

Only 22% of the seventy-seven respondents indicated using their employee sponsored well-being program. Due to low usage rate, the data of what healthcare employees wanted from well-being was collected holistically instead of being analyzed based on a general, mental, or physical well-being grouping. The most common requests were for mindfulness programs, nutrition advice, an on-site fitness center or gym discounts, fitness challenges, and counseling/therapy available for staff, as seen in Appendix B. The low usage and knowledge

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of employer sponsored well-being programs and/or initiatives indicates poor communication and construction of programs as later discussed in the conclusion.

LIMITATIONS

There were several limitations to this study. First, respondents were chosen through a convenience sample. This resulted in healthcare workers that were of similar age, gender, and have similar occupations. Another limitation was the length of the survey. It took 5-10 minutes which is not very long, but for healthcare professionals to take time out of their day to take a survey, the number of questions may have been a turn off.

The survey included many questions about physical and mental health. There is a possibility that respondents gave dishonest answers or misremembered certain data points when asked about the frequency of certain factors (such as fruit and vegetable consumption).

CONCLUSION

Below are the initial hypotheses:

1. The general well-being of healthcare workers will be lower than the recommended standards encouraged by the Center for Disease Control and Prevention
2. Healthcare workers will be aware of wellness programs and/or initiatives at their place of work
3. Those that utilize workplace wellness programs will have better general well-being than those that do not
4. Healthcare employers do not offer sufficient wellness programs

Since conducting the survey, two of the four hypotheses were supported. For the first hypotheses, only 9.7% of respondents reach or exceed the recommended health standards as encouraged by the CDC, indicating the general well-being of healthcare workers is low. This was not based off a self-evaluation of general well-being, but an analysis of hours of sleep, physical activity, consumption of fruits and vegetables, and whether the individual smokes. The second hypothesis was not found to be supported as 40.26% of respondents did not know of any well-being programs or initiatives at their place of work and only 22.08% reported

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taking advantage of them either some of the time or frequently. Well-being programs and initiatives are not worth any return on investment if most employees are not aware of them. Additionally, 45.45% of respondents indicated that their place of employment did not emphasize mental and physical wellness since the outbreak of the COVID-19 pandemic. Some employers may have had initiatives but because they were not well advertised or communicated, it potentially led employees to believe that their place of employment does not care about their well-being. This relates to the fourth hypothesis that most healthcare employers do not offer sufficient wellness programs. There were thirty-four different employers represented and not one employer had results indicating a strong wellness program. Only 9.09% of respondents indicated that they very much thought the wellness programs sponsored by their workplace are valuable and 5.41% indicated noticing a positive change in their mental and/or physical wellness after utilizing them.

There were not enough conclusive results to prove the third hypothesis since only one respondent that indicated utilizing wellness programs at their place of work is categorized as having a strong general well-being based on CDC standards. The research previously has indicated this hypothesis to be true, but this study cannot give conclusive data to support it.

RECOMMENDATIONS FOR FUTURE RESEARCH

Future studies may seek to broaden the sample size of healthcare workers and examine pre- and post- changes to physical and mental well-being after a wellness program is instituted. It may be worthwhile to analyze if healthcare workers that utilize workplace wellness programs do have higher general well-being and how it affects patient care or the perception of how much an employer cares about the overall well-being of the employees. Additionally, employees shared that they would want time during the workday to take advantage of wellness initiatives. Even though there are expenses associated with employers offering wellness programs during company time, but it may result in reduced absenteeism, turnover, and increased performance.

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APPENDICES

Appendix A – Respondents’ Usage of Wellness Programs at Work Based on Self-Rating of Overall General Health

	No usage of wellness programs	Sometimes utilized wellness programs	Frequently utilized wellness programs	Respondent did not know of any wellness programs
Excellent	33%	33%	0%	33%
Very Good	31.4%	28.6%	0%	40%
Good	45.5%	13.6%	4.5%	36.4%
Fair	60%	0%	0%	40%

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Appendix B – Respondent’s Requests for Well-Being Programs/Initiatives

# Of Requests	Request
20	Mindfulness
16	Nutrition
13	On-site fitness center or gym discounts
8	Fitness challenges
8	Counseling
4	Fitness incentives
3	Stress management workshop
3	Time during the workday to take advantage of wellness activities
3	Work-life balance emphasis
2	Yoga
1	Art center
1	Sleep hygiene
1	Time management

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Appendix C –Responses on What Influences Their Mental and Physical Health

Regular periods of quiet time without phone surfing, TV, radio or human interaction
Social life, family, financial situation, religion/culture
Finding breaks to let myself relax
We have not gotten a raise in 3 years, despite working during a pandemic where health care workers are being highly coveted and rewarded financially
Mental health of healthcare workers is an area that needs high priority attention or else we will start to see a high level of turn over
Working in healthcare, despite having an organization that offers wellness, I can't take advantage because I am seeing patients
Outside work stressors
Stress outside of work
I am a psych nurse, and we are expected to disregard our own mental health
Management is really important to the impact of my job on my mental and physical health, specifically how they respond to concerns
Diet culture / fat phobia is present everywhere and can be very harmful
I manage my mental and physical health outside of work programs. I have weekly therapy sessions for my mental health. I work 3 different jobs and have been very sedentary the past decade or so, so I need to do more for my physical health, but my time and motivation currently is very low
I really like that Bryant offers counseling
Stress
Being over worked, under-appreciated, and under compensated
I'm mentally ill and have 2 autoimmune diseases :)
Mechanisms for coping with stress is important
People to understand mental health and be more open to others with poor mental health
Health of my family and friends, ongoing war in Ukraine

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Appendix D –Responses on What Organization Could Offer to Enhance Mental and Physical Well-being

Full lunch breaks and leaving work on time EVERY day
Support groups or team bonding activities with staff that are fun and active
Vouchers for gym memberships, discounts at cafes and other nutritional services would be great!
More respect while working and consideration for employees
Get a planner and write everything down!!
Better pay, better hours
They could offer resources
See above suggestion (We have not gotten a raise in 3 years, despite working during a pandemic where health care workers are being highly coveted and rewarded financially)
Allowing time (not including lunch) to be set aside for wellness.... after all its required to give smokers multiple smoking breaks throughout the day.....
Give more time for wellness to healthcare workers
Flexible work schedule
More paid sick days/time off
Gym membership
Anonymous counseling, peer-to-peer counseling, free fitness center membership
Free counseling, more holiday time, more sick days than the bare minimum required by law
Time off with pay, more vacation time
Supervision for difficult cases etc. like all other disciplines
As mentioned, ensuring healthy balance between work/life commitments and stressors is the biggest aspect I value from my employers
Fitness challenges
Better staffing
Better incentives
Classes, challenges, walks for causes, etc.
More paid personal days off
Free nutritional and mental health counseling
Stress management
Adequate staffing, acceptable wages
Counseling, fitness facility, incentives
Would have been nice to have had someone to advise me on time management, since that is my biggest struggle
Yoga classes
Exercise facility on site
Actual scheduled lunch breaks
Free gym membership, free supplements
Acknowledgement of mental health
Better access and scheduling to counseling services
Stipend to use on recreation
More money to spend on time off

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Appendix E – Consent Form for Survey

Your responses are completely anonymous. General questions will be asked about your physical and mental health. The decision to participate in this study is completely voluntary and up to you. You may refuse to take part in the study at any time without affecting your relationship with the investigator of this study at Bryant University. You have the right to withdraw completely from the survey at any point during the process. You have the right to ask questions about this research study and to have those questions answered by me before, during, and after the study. Additionally, you may contact the Bryant Institutional Review Board (IRB) if you have questions regarding your rights as a research participant. Additionally, you can contact the IRB if you have questions, complaints, or concerns which you do not feel you can discuss with the researcher. If you would like to keep a copy of this document for your records, please print or save this page now.

This survey contains questions pertaining to mental and physical health. If at any point you experience adverse emotions, please halt participation and seek appropriate help. The National Institute of Mental Health has a Crisis Text hotline that is available 24 hours a day, seven days a week throughout the U.S. The Crisis Text Line serves anyone, in any type of crisis, connecting them with a crisis counselor who can provide support and information. If you would like to reach out for help, please text "HELLO" to the Crisis Text Line 741741.

All responses will remain anonymous and confidential. No information will be collected that can personally identify you or associate you with your responses. All survey data will be stored on the primary researcher's computer in a password-protected file, and will be used solely for the purpose of this research

By clicking "accept" below, you indicate that you have read and understood the participation authorization and volunteer to participate in this study.

Contact: cpapayannopoulos@bryant.edu

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Appendix F – Survey Questions

1. What is your gender?
 - Female
 - Male
 - Non-binary
 - Prefer not to say
2. What is your age?
 - 18-24
 - 25-34
 - 35-44
 - 44-54
 - 55+
3. What is the highest degree you currently hold?
 - High School Diploma
 - Associates Degree
 - Bachelor's degree
 - Master's Degree
 - PhD
4. What is your job title?
5. How long have you been at your current place of work?
 - <1 Year
 - 1-5 Years
 - 5-10 Years
 - 10+ Years
6. What healthcare facility do you work in?
7. Would you say that your general health is:
 - Excellent
 - Very Good
 - Good
 - Fair
 - Poor

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8. Thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?
 - 0-5 Days
 - 6-10 Days
 - 11-20 Days
 - 21-30 Days
9. Thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?
 - 0-5 Days
 - 6-10 Days
 - 11-20 Days
 - 21-30 Days
10. During the past 30 days, for how many days did poor physical or mental health keep you from doing your usual activities such as self-care, work, or recreation?
 - 0-5 Days
 - 6-10 Days
 - 11-20 Days
 - 21-30 Days
11. On average, how many hours of sleep do you get in a 24-hour period?
 - 1-5 Hours
 - 6-8 Hours
 - 8+ Hours
12. Do you currently smoke cigarettes?
 - Not at all
 - Some Days
 - Most Days
 - Every Day
13. During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit smoking?
 - Yes
 - No
 - I don't smoke

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14. During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, yoga, strength training, walking for exercise, or other?
- No
 - Yes, 1-5 Days
 - Yes, 6-10 Days
 - Yes, 11-20 Days
 - Yes, 21-30 Days
15. When you took part in this activity, for how many minutes did you usually keep at it?
- 1-15 Minutes
 - 16-30 Minutes
 - 31-59 Minutes
 - 60+ Minutes
16. Think about the food you ate or drank during the past 30 days, including meals and snacks. Not including juices, how often did you eat fruit?
- 0-5 Days
 - 6-10 Days
 - 11-20 Days
 - 21-30 Days
17. How often did you eat a green leafy or lettuce salad, with or without other vegetables?
- 0-5 Days
 - 6-10 Days
 - 11-20 Days
 - 21-30 Days
18. Not including lettuce salads and potatoes, how often did you eat other vegetables?
- 0-5 Days
 - 6-10 Days
 - 11-20 Days
 - 21-30 Days
19. I see myself as someone who...
- Worries a lot

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Gets nervous easily
Remains calm in tense situations
Is talkative
Is outgoing, sociable
Is reserved
Is original, comes up with new ideas
Values artistic, aesthetic experiences
Has an active imagination
Is sometimes rude to others
Has a forgiving nature
Is considerate and kind to almost everyone
Does a thorough job
Tends to be lazy
Does things efficiently

20. If it is available, do you utilize the wellness programs and/or initiatives at your place of work?

No

I don't know of any wellness programs and/or initiatives

Yes, sometimes

Yes, frequently

21. Do you feel as though your place of work emphasized the importance of mental and physical wellness since the outbreak of the COVID-19 pandemic?

Not at all

A little bit

Yes, very much so

22. Do you think the wellness programs sponsored by your workplace are valuable?

I don't know of any wellness programs and/or initiatives

I know of wellness programs and/or initiatives but have never participated in a wellness program and/or initiatives

Not at all

A little bit

Yes, very much so

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23. If you have utilized a workplace wellness program or initiative at your current place of work, did you notice a positive change in your mental and/or physical wellness?

I don't know of any wellness programs and/or initiatives

I know of wellness programs and/or initiatives but have never participated in a wellness program and/or initiatives

Not at all

A little bit

Yes, very much so

24. What aspects would you want out of a wellness program (ex: nutrition advice, fitness challenge, mindfulness, etc.)?

25. Would you like to give additional comments on factors that influence your mental and physical health?

26. What could your organization offer you to enhance your mental and physical well-being?

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REFERENCES

- Abdullahi, A. M., Orji, R., Rabi, A. M., & Kawu, A.A. (2020). Personality and Subjective Well-Being: Towards Personalized Persuasive Interventions for Health and Well-Being. *Online Journal of Public Health Informatics, 12*(1), <https://doi.org/10.5210/ojphi.v12i1.10335>
- American Nurses Association. (2011). Registered nurses in the U.S: Nursing by the numbers. Retrieved from www.nursingworld.org/Content/NNWArchive/NationalNursesWeek/MediaKit/Nursin15gbytheNumbers.pdf Centers for Disease Control and Prevention. (2014). Overweight and obesity. Retrieved from www.cdc.gov/obesity/index.html
- Bureau, U.S. Census. “Women Hold 76% of All Health Care Jobs, Gaining in Higher-Paying Occupations.” *Census.gov*, 8 Oct. 2021, <https://www.census.gov/library/stories/2019/08/your-health-care-in-womens-hands.html>.
- Bradley, Meredith, and Praveen Chahar. “Burnout of Healthcare Providers during COVID-19.” *Cleveland Clinic Journal of Medicine*, 2020, doi:10.3949/ccjm.87a.ccc051.
- Brusie, Chaunie. “Study Reveals Alarming Statistics on Nurse Burnout.” *Nurse.org*, 7 Apr. 2019, nurse.org/articles/nurse-burnout-statistics/.
- Carson-Newman University Online 29 April 2020, and 29 April 2020 by Carson-Newman University Online. “By the Numbers: Nursing Statistics 2020.” *Nursing Statistics 2020 - By the Numbers | Carson-Newman*, 8 Oct. 2020, onlinenursing.cn.edu/news/nursing-bythe-numbers.
- “CDC - Data and Statistics - Sleep and Sleep Disorders.” *Centers for Disease Control and Prevention*, Centers for Disease Control and Prevention, 2 May 2017, https://www.cdc.gov/sleep/data_statistics.html#:~:text=Adults%20need%207%20or%20more,the%20best%20health%20and%20wellbeing.&text=Short%20sleep%20duration%20is%20defined,sleep%20per%2024%2Dhour%20period.
- David P. Fessell and Daniel Goleman. “How Health Care Workers Can Take Care of Themselves.” *Harvard Business Review*, 17 Aug. 2020, hbr.org/2020/05/how-health-careworkers-can-take-care-of-themselves.

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Hawkins, Merritt. "Percentage of Physicians in the U.S. That Have Feelings of Professional Burnout as of 2018."

The Physicians Foundation, Sept. 2018, p. 14

"How Much Physical Activity Do Adults Need?" *Centers for Disease Control and Prevention*, Centers for Disease Control and Prevention, 17 Mar. 2022,
<https://www.cdc.gov/physicalactivity/basics/adults/index.htm>.

HSU, et al. "Predictors of Wellness Behaviors in U.S. Army Physicians." *Military Medicine*, vol. 183, no. 11-12, 1 Nov. 2018, pp. e641–e648.

<http://web.b.ebscohost.com/bryant.idm.oclc.org/ehost/detail/detail?vid=5&sid=cbbbe79bcd48-4e6f-8da1-f03bcc2f5a16%40pdc-vsessmgr05&bdata=JnNpdGU9ZWWhvc3QtbGl2ZQ%3d%3d#AN=29912440&db>

Kalina, Christine, et al. Building a Nurse Initiated Wellness Program .

<https://journals-sagepub-com.bryant.idm.oclc.org/doi/pdf/10.1177/216507999504300305>

Lang, F. R., John, D., Ludtke, O., Schupp, J., & Wagner, G. G. (2011).

Short assessment of the Big Five: robust across survey methods except telephone interviewing. *Behavior Research Methods*, 43, 548-567.

LifeBridge - Physician Wellness Program,
www.physicianwellnessprogram.org/.

"Percentage of Physicians in the U.S. That Have Feelings of Professional Burnout as of 2018."

2019 Survey of America's Physicians, Sept. 2018, p. 14.

Purdue University Global. "Importance of Self-Care for Nurses and How to Put a Plan in Place."

Purdue Global, Purdue University Global, 13 Feb. 2019,
www.purdueglobal.edu/blog/nursing/self-care-for-nurses/

Samantha Artiga, Matthew Rae. "Key Characteristics of Health Care Workers and Implications for Covid-19 Vaccination." *KFF*, 22 Jan. 2021,
[https://www.kff.org/coronavirus-covid-19/issue-brief/key-characteristics-of-health-care-workers-and-implications-for-covid-19-vaccination/#:~:text=Age.,%25\)%20are%20below%20age%2035.](https://www.kff.org/coronavirus-covid-19/issue-brief/key-characteristics-of-health-care-workers-and-implications-for-covid-19-vaccination/#:~:text=Age.,%25)%20are%20below%20age%2035.)

Speroni, K., (September 30, 2014) "Designing Exercise and Nutrition Programs to Promote Normal Weight Maintenance for Nurses"

What About Them? The Health and Well-being of Those Who Care for Others
Honors Thesis for Catherine Papayannopoulos

OJIN: The Online Journal of Issues in Nursing Vol. 19, No. 3, Manuscript 6

Schwartz, R., Shanafelt, T. D., Gimmler, C., & Osterberg, L. (2020).

Developing institutional infrastructure for physician wellness: qualitative Insights from VA physicians. *BMC 16 Health Services Research*, 20(1), 7. <https://doi-org.bryant.idm.oclc.org/10.1186/s12913-019-4783-9>

“Wellness Programs for Healthcare Workers.” University of Texas at Arlington Online, 3 Jan. 2019,

academicpartnerships.uta.edu/articles/healthcare/wellness-programs-healthcareworkers.aspx.

“Taking Care of Care Providers: A Wellness Program for Pediatric Nurses.” *Journal of Pediatric Oncology Nursing*,

<https://journals-sagepub-om.bryant.idm.oclc.org/doi/pdf/10.1177/1043454212451793>

“Total Number of Doctors of Medicine in the U.S. from 1949 to 2015*.”

American Medical Association; US Department of Health and Human Services, Sept. 2018, p. xii.

“2019 BRFSS Questionnaire BRFSS.”

Center for Disease Control and Prevention , 2019,

www.cdc.gov/brfss/questionnaires/pdf-ques/2019-BRFSS-Questionnaire-508.pdf.

Zadeh S, Gamba N, Hudson C, Wiener L.

Taking care of care providers: a wellness program for pediatric nurses. *J Pediatric Oncol Nurs*. 2012 Sep-Oct;29(5):294-9. doi: 10.1177/1043454212451793. PMID: 22907685; PMCID: PMC5178976.