SES2203 Assessment 2 Name

Introduction

The first part of this essay seeks to define depression and elaborate on its prevalence in Australia with regards to biological and social factors such as gender, age, and ethnicity. Following the first part, the second part aims to discuss the possible recommendations for physical activity/exercise, muscle strengthening, and sedentary time for the management of depression. The third part details several agencies that are essential to carrying out the recommendations in the second part. Finally, part four briefly explains self-efficacy in the context of behaviour change theory and the relationship between self-efficacy and physical exercise/activity adherence.

Defining Depression & Its Prevalence:

Depression is defined as a mood disorder characterised by the feeling of hopelessness, sadness, irritability, and loss of interest and pleasure (Angst & Dobler-Mikola, 1984). While the severity and subcategory of depression vary to a great extent where people with different biological traits and social backgrounds are affected disproportionately and differently by depression, the aforementioned symptoms are generally acknowledged as universal features that define depression as a mental disorder.

Depression, as one of the most common mental disorders in Australia, affects a total of 1 million Australians every year (Kasturi et al., 2023). It is important to take demographics in terms of gender, ethnicity, and age into account when interpreting the data because doing so allows policymakers and health and helping professionals to identify the level of susceptibility and allocate the existing resources to the most vulnerable. In the context of age, an average of 25% of nearly all Australian children and young adults aged between 10 and 24 years report having depression, with 26.1% in urban areas and 24.9% in rural areas (Kasturi et al., 2023). In contrast, the prevalence of depression among Australian adults aged 75 and older ranges from 4.6% to 9.3% (Mohebbi et al., 2019). In regards to the prevalence of depression among the two dominant genders, a significantly higher number of Australian women experience depression compared to men (Rich et al., 2013). Furthermore, Indigenous Australians suffer from depression at a much higher rate than the general Australian

population (Page et al., 2022).

Discussion on the Recommendations for Exercise and Sedentary Time for managing depression

Although anti-depressant medications are still the primary treatment method for managing depression, physical exercise, when prescribed in accordance with the patients' individual characteristics, not only reduces the severity of depressive symptoms, but also benefits the patients in terms of longevity, cardiovascular health, and physical strength, which, considering the fact that muscular strength decreases with age, is especially important for older adults who suffer from falling due to a lack of muscular strength (Bardstu et al., 2020).

Previous research has demonstrated that physical exercise is an effective treatment for depression in that it can serve as a distraction to negative thoughts, modulate the release of certain neurotransmitters, and increase self-efficacy in certain patients (Murri et al., 2019; Craft & Perna, 2004). Interestingly, aerobic exercise in particular was found to increase exercise efficacy among patients with major depression (Schuch et al., 2016). It remains arguable as to what type of exercise works the best in facilitating the efficacy and insistence among patients with depression, as there is a lack of evidence addressing this topic, and whether aerobic exercise surpasses anaerobic exercise in promoting exercise efficacy may be partly affected by individual preferences and current physical condition upon receiving the exercise as a prescription. When comparing the effect of aerobic exercise and anaerobic exercise on treating depression, both types of exercise were proven to be effective in alleviating the symptoms of depression while no significant difference in regards to the effect was found (Martinsen et al., 1989).

Thus, based on the existing evidence, both aerobic exercises such as walking and running and anaerobic exercise-mainly resistance training-are promising treatment methods for depression. What is important is that health professionals prescribing exercise should customise the exercise regime to achieve the best result with respect to the recipients' physical condition and preferences. To put it into perspective, patients with depression need to be physically assessed before being told to follow a certain regimen because aerobic exercise with certain intensity might be harmful to patients suffering from cardiovascular diseases, and strength training is less desirable for patients taking anti-depressants causing

prolonged muscle weakness. The benefits of aerobic and anaerobic exercise, which are increased VO2 max, more muscle mass, increased muscle endurance, and increased muscular strength, cannot be received with certain physical conditions and medications counteracting against them.

Sedentary behaviour can increase the risk of developing depression and solidify the symptoms of depression (Hallgren et al., 2016; del Pozo Cruz et al., 2020). Notably, there has been virtually no study conducted to examine the optimal dose of exercise for treating depression and the length of sedentary time to which depressed individuals should restrict themselves (Hallgren et al., 2016). A study done by del Pozo Cruz and his colleagues (2020) reveals that spending 60 minutes per day engaging in moderate-to-vigorous physical activity instead of sedentary behaviour can reduce depression symptoms. Hence, it may be advisable to prescribe patients with depression 60 minutes of moderate-to-vigorous exercise per day in order to manage the depression. Notwithstanding, the exact amount of time needed for managing depression is debatable and may depend on patients' physical condition and the severity and type of depression found in them.

Primary Agencies:

There are several agencies that are important when health professionals try to apply the recommendations mentioned above. First of all, the Department of Health and Aged Care of the Australian Government plays a critical role in developing a comprehensive and evidence-based intervention/program and guideline regarding the prescription of physical activity, strengthening exercise, and sedentary time, all of which are to be followed by healthcare system and non-governmental agencies such as private fitness and medical practices. Adopting a top-down approach, the Department of Health and Aged Care plays a role in laying out the general guidelines and programs.

However, to implement and apply these guidelines and programs to the patients of depression, psychiatric hospitals, community centers, and practitioners with certified training in sports science and medicine will need to be included because they are the forefront with which patients interact. In short, psychiatric hospitals can prescribe physical exercise and activity and the optimal duration of sedentary time to the patients. Community centers and certified practitioners can help the patients to manage depression through tracking their

progress, adherence, whether the prescribed amount of physical activity, strengthening exercise, and sedentary time are working as expected, and if they are doing exercises in right form.

Self-efficacy and Its Relationship with Physical Exercise/Activity among Depressed Patients

In the context of behaviour change theory, self-efficacy refers to a person's belief or confidence in his or her capability to change an existing behaviour in order to achieve a desired outcome. Self-efficacy is an essential determinant of adherence to the physical activity/exercise prescribed to patients with depression.

A higher level of self-efficacy is correlated with higher adherence to physical activity and exercise among young adults (Desharnais et al., 1986). For Australian older adults aged 65 to 96 years old, the same correlation exists (Miller et al., 2019). In depressed adults, self-efficacy is comparatively lower than in adults without depression (Bandura, 1997). Hence, it becomes extra difficult for health professionals to ensure the adherence to physical activity/exercise among patients with depression.

Conclusion

In conclusion, being one of the most prevalent mental disorders in Australia, depression affects people of all genders, races, and age groups, with women, indigenous Australians, and young Australians aged 10 to 24 being affected disproportionately. While using physical activity/exercise as a means to manage depression can be effective to some extent, it remains unclear as to the optimal dose and type of physical activity/exercise that should be prescribed to individual patients. The Department of Health and Aged Care, psychiatric hospitals, community resources, and individual certified practitioners are the primary agencies addressing the issue of depression through developing guidelines and interventions. It is also important to be aware of the fact that low-efficacy found common among depressed patients can hinder their adherence to physical activity/exercise.

References

- Angst, J., & Dobler-Mikola, A. (1984). The definition of depression. *Journal of Psychiatric Research*, 18(4), 401–406. https://doi.org/10.1016/0022-3956(84)90029-3
- Bandura, A. (1997). Self-Efficacy: The Exercise of Control. *Journal of Cognitive Psychotherapy*, 13(2), 158–166. https://doi.org/10.1891/0889-8391.13.2.158
- Bårdstu, H. B., Andersen, V., Fimland, M. S., Aasdahl, L., Raastad, T., Cumming, K. T., & Sæterbakken, A. H. (2020). Effectiveness of a resistance training program on physical function, muscle strength, and body composition in community-dwelling older adults receiving home care: a cluster-randomized controlled trial. *European Review of Aging and Physical Activity*, 17(1). https://doi.org/10.1186/s11556-020-00243-9
- Belvederi Murri, M., Ekkekakis, P., Magagnoli, M., Zampogna, D., Cattedra, S., Capobianco, L., Serafini, G., Calcagno, P., Zanetidou, S., & Amore, M. (2019). Physical Exercise in Major Depression: Reducing the Mortality Gap While Improving Clinical Outcomes. *Frontiers in Psychiatry*, 9(762). https://doi.org/10.3389/fpsyt.2018.00762
- Craft, L. L., & Perna, F. M. (2004). The Benefits of Exercise for the Clinically Depressed. The Primary Care Companion to the Journal of Clinical Psychiatry, 06(03), 104–111. https://doi.org/10.4088/pcc.v06n0301
- del Pozo Cruz, B., Alfonso-Rosa, R. M., McGregor, D., Chastin, S. F., Palarea-Albaladejo, J., & del Pozo Cruz, J. (2020). Sedentary behaviour is associated with depression symptoms: Compositional data analysis from a representative sample of 3233 US adults and older adults assessed with accelerometers. *Journal of Affective Disorders*, 265, 59–62. https://doi.org/10.1016/j.jad.2020.01.023
- Desharnais, R., Bouillon, J., & Godin, G. (1986). Self-Efficacy and Outcome Expectations as Determinants of Exercise Adherence. *Psychological Reports*, *59*(3), 1155–1159. https://doi.org/10.2466/pr0.1986.59.3.1155
- Kandola, A., Ashdown-Franks, G., Hendrikse, J., Sabiston, C. M., & Stubbs, B. (2019). Physical activity and depression: Towards understanding the antidepressant mechanisms of physical activity. *Neuroscience & Biobehavioral Reviews*, 107, 525–539. https://doi.org/10.1016/j.neubiorev.2019.09.040
- Kasturi, S., Oguoma, V. M., Grant, J. B., Niyonsenga, T., & Mohanty, I. (2023). Prevalence Rates of Depression and Anxiety among Young Rural and Urban Australians: A Systematic Review and Meta-Analysis. *International Journal of Environmental Research and Public Health*, 20(1), 800. https://doi.org/10.3390/ijerph20010800

- Miller, K. J., Mesagno, C., McLaren, S., Grace, F., Yates, M., & Gomez, R. (2019). Exercise, Mood, Self-Efficacy, and Social Support as Predictors of Depressive Symptoms in Older Adults: Direct and Interaction Effects. Frontiers in Psychology, 10. https://doi.org/10.3389/fpsyg.2019.02145
- Mohebbi, M., Agustini, B., Woods, R. L., McNeil, J. J., Nelson, M. R., Shah, R. C., Nguyen, V., Storey, E., Murray, A. M., Reid, C. M., Kirpach, B., Wolfe, R., Lockery, J. E., & Berk, M. (2019). Prevalence of depressive symptoms and its associated factors among healthy community-dwelling older adults living in Australia and the United States. *International Journal of Geriatric Psychiatry*, *34*(8), 1208–1216. https://doi.org/10.1002/gps.5119
- Page, I. S., Ferrari, A. J., Slade, T., Anderson, M., Santomauro, D., & Diminic, S. (2022). Estimating the difference in prevalence of common mental disorder diagnoses for Aboriginal and Torres Strait Islander peoples compared to the general Australian population. *Epidemiology and Psychiatric Sciences*, 31. https://doi.org/10.1017/s2045796022000233
- Rich, J. L., Byrne, J. M., Curryer, C., Byles, J. E., & Loxton, D. (2013). Prevalence and correlates of depression among Australian women: a systematic literature review, January 1999- January 2010. *BMC Research Notes*, *6*, 424. https://doi.org/10.1186/1756-0500-6-424
- Schuch, F. B., Dunn, A. L., Kanitz, A. C., Delevatti, R. S., & Fleck, M. P. (2016). Moderators of response in exercise treatment for depression: A systematic review. *Journal of Affective Disorders*, 195, 40–49. https://doi.org/10.1016/j.jad.2016.01.014