

Exercise as an Essential Therapeutic Tool in Mental Health: Closing the Gap From Research to Practice, A Portuguese Perspective



O Exercício como Uma Ferramenta Terapêutica Essencial na Saúde Mental: Encurtando a Diferença Entre a Pesquisa e a Prática, Uma Perspetiva Portuguesa

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According to the World Mental Health Survey, Portugal has the second highest prevalence of mental disorders among the ten European countries included in the survey (22.9% in 2008). One out of five Portuguese suffer from mental health problems, 16.5% experience anxiety disorders, and 6.8% suffer from major depressive disorder (MDD).¹

Over the past decade, there has been a rapid accumulation of evidence regarding the benefits of physical activity, and the structured subset of exercise in people with mental disorders.² Studies have repeatedly demonstrated that even a small increase in physical activity has beneficial effects on symptoms and functioning in mental illness, regardless of the severity of the condition.³ The benefits include improvements in general psychological wellbeing, reduced levels of psychiatric symptoms, and improved cognitive functioning, as well as better physical function, social integration, physical health (e.g., an enhanced cardiovascular risk profile), sleep quality, self-esteem, and quality of life.⁴ Additionally, it is well documented that somatic comorbidities, including diabetes and cardiovascular disease are decisive contributors to premature mortality in people experiencing mental illness.⁵ Thus, reflecting the double impact of physical activity on both physical and mental health outcomes of people experiencing mental illness, the interest in the integration of physical activity as a routine component of treatment for this population has been growing. However, despite considerable advances, translation of this evidence into practice across Portugal remains *ad hoc*. People experiencing mental illness largely remain physically inactive and at risk for engaging in high levels of sedentary behaviour.

Considerable evidence from randomized controlled

trials (RCTs) supports the efficacy of exercise which has been accumulated for years,⁶ and has led to the inclusion of exercise guidelines from the National Institute for Health & Clinical Excellence (NICE)⁷ and the American Psychiatric Association (APA).⁸ The NICE⁷ guidelines recommend regular physical activity programs, three times weekly, 45 - 60 minutes over 10 - 14 weeks (average 12 weeks) for people with persistent subthreshold depressive symptoms or mild to moderate depression. However, they do not include any considerations or recommendations specific to intensity. In addition, the current APA guidelines⁸ report that patients suffering from depression of any severity and not having any comorbid medical contraindications in relation to exercise should include it as a treatment component. Therefore, this is a reasonable addition to a treatment plan for MDD. However, it does not specify the suitable dose.

Aiming to close the gap and help translate evidence to practice and achieve a better prescription, recent systematic reviews of RCTs have been published providing set recommendations for exercise program variables in the treatment of patients with depression.⁹

In fact, there is evidence that supervised aerobic exercise is beneficial when carried out three times per week, at moderate intensity for a minimum of nine weeks.⁹

Examples of clinical exercise programs within psychiatric treatment facilities are increasing in many countries, including Australia. The Mental Health Intensive Care Unit (MHICU) at Prince of Wales Hospital (Randwick, NSW, Australia) and the 'Keeping the Body in Mind' program within the Early Psychosis Programme at South Eastern Sydney Local Health District are two promising examples of successful integration of exercise-based interventions delivered by exercise clinicians (exercise physiologists

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and physiotherapists) as members of the multidisciplinary mental health team.¹⁰

This raises the question: Why are there barriers to the integration of physical activity into the mental health care system in Portugal and how can they be overcome? The key is detecting potential barriers to decrease the gap between knowledge and clinical application and creating a collective will to deliver change. To achieve successful implementation, changes in the delivery of health care are required, and in order to create these, mental health needs to have the same priority as physical health for people living with mental illness. An alliance between those working within the health care system is also needed in order to truly deliver multidisciplinary care. In fact, integrating exercise as a therapeutic intervention requires a change in culture and system reform.³

To provide safe interventions, qualified exercise professionals with expertise in exercise prescription, with additional knowledge regarding psychopathology,

should be part of multidisciplinary mental health teams, as they are able to identify and recognize symptomatology, and secondary effects of psychotropic medication.¹¹ In addition, previous exercise history, lack of motivation, and inexperience with effort intensity can act as hurdles that limit physical activity adherence and should be addressed.³

To demystify the idea that exercise is 'not a one size fits all' intervention³ with only pros without cons, leading to immediate results, is a major step to achieving progress in exercise prescription.

Based on recent evidence, we would encourage the routine inclusion of supervised and individualized exercise interventions for all mental disorders.

Indeed, exercise is Medicine, is it not?

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REFERENCES

- Almeida JA, Xavier M, Cardoso G, Pereira MA, Gusmão R, Corrêa B, et al. Estudo Epidemiológico Nacional de Saúde Mental: 1º relatório. Lisboa: Faculdade de Ciências Médicas, Universidade Nova de Lisboa; 2013.
- Rosenbaum S, Tiedemann A, Stanton R, Parker A, Waterreus A, Curtis J, et al. Implementing evidence-based physical activity interventions for people with mental illness: an Australian perspective. *Australas Psychiatry*. 2016;24:49-54.
- Vancampfort D, Stubbs B, Ward PB, Teasdale S, Rosenbaum S. Integrating physical activity as medicine in the care of people with severe mental illness. *Aust N Z J Psychiatry*. 2015;49:681-2.
- Schuch FB, Vancampfort D, Rosenbaum S, Richards J, Ward PB, Stubbs B. Exercise improves physical and psychological quality of life in people with depression: A meta-analysis including the evaluation of control group response. *Psychiatry Res*. 2016;241:47-54.
- Vancampfort D, Stubbs B, Mitchell AJ, De Hert M, Wampers M, Ward PB, et al. Risk of metabolic syndrome and its components in people with schizophrenia and related psychotic disorders, bipolar disorder and major depressive disorder: A systematic review and meta-analysis. *World Psychiatry*. 2015;14:339-47.
- Schuch FB, Vancampfort D, Richards J, Rosenbaum S, Ward PB, Stubbs B. Exercise as a treatment for depression: A meta-analysis adjusting for publication bias. *J Psychiatr Res*. 2016;77:42-51.
- National Institute for Health and Clinical Excellence Depression: The treatment and management of depression in adults (updated edition). 2009. [accessed 2017 Mai 16]. Available from: <https://www.nice.org.uk/guidance/cg90>.
- American Psychiatric Association. Practice Guideline for the Treatment of Patients with Major Depressive Disorder. 3rd ed. Chicago: APA; 2010.
- Stanton R, Reaburn P. Exercise and the treatment of depression: A review of the exercise program variables. *J Sci Med Sport*. 2013;17:177-82.
- Rosenbaum S, Watkins A, Ward PB, Pearce D, Fitzpatrick K, Curtis J. Keeping the body in mind team, S. *Psychiatry HeAL thyself! Aust N Z J Psychiatry*. 2016;50:600.
- Vancampfort D, Stubbs B, Ward PB, Teasdale S, Rosenbaum S. Why moving more should be promoted for severe mental illness. *Lancet Psychiatry*. 2015;2:295.