This text and the accompanying exercises use the following article:

Exercise for Mental Health

Translate the following words into French

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Sir: In this era of exponential growth of the "metabolic syndrome" and obesity, lifestyle modifications could be a cost-effective way to improve health and quality of life. Lifestyle modifications can assume especially great importance in individuals with serious mental illness. Many of these individuals are at a high risk of chronic diseases associated with sedentary behavior and medication side effects, including diabetes, hyperlipidemia, and cardiovascular disease. An essential component of lifestyle modification is exercise. The importance of exercise is not adequately understood or appreciated by patients and mental health professionals alike. Evidence has suggested that exercise may be an often-neglected intervention in mental health care. ²

["Metabolic syndrome" has been defined by the World Health Organisation as glucose intolerence, impaired glucose tolerance (IGT) or diabetes mellitus (DM), and/or insulin resistance, combined with other symptoms.]

| 1/ cost effective | , |
|---|---|
| 2/ to improve | |
| 3/ side effects | |
| What does the paragraph say about: | |
| 1/ the consequences of sedentary behavior | |
| | |
| 2/ the role of exercise in mental health | |
| | |

Aerobic exercises, including jogging, swimming, cycling, walking, gardening, and dancing, have been proved to reduce anxiety and depression.³ These improvements in mood are proposed to be caused by exercise-induced increase in blood circulation to the brain and by an influence on the hypothalamic-pituitary-adrenal (HPA) axis and, thus, on the physiologic reactivity to stress.³ This physiologic influence is probably mediated by the communication of the HPA axis with several regions of the brain, including the limbic system, which controls motivation and mood; the amygdala, which generates fear in response to stress; and the hippocampus, which plays an important part in memory formation as well as in mood and motivation.

[The hypothalamic-pituitary-adrenal axis (HPA axis or HTPA axis) is a complex set of direct influences and feedback interactions among three components: the hypothalamus, the

| pituitary gland (a pea-shaped structure located below the thalamus), and the adrenal (also called "suprarenal") glands (small, conical organs on top of the kidneys). Wikipedia] | |
|---|--|
| What are the benefits of aerobic exercises? | |
| What does the amygdala do? | |
| What is the role of the hippocampus? | |
| Other hypotheses that have been proposed to explain the beneficial effects of physical activity on mental health include distraction, self-efficacy, and social interaction. While structured group programs can be effective for individuals with serious mental illness, lifestyle changes that focus on the accumulation and increase of moderate-intensity activity throughout the day may be the most appropriate for most patients. [] | |
| Exercise improves mental health by reducing anxiety, depression, and negative mood and by improving self-esteem and cognitive function. ² Exercise has also been found to alleviate symptoms such as low self-esteem and social withdrawal. ³ Exercise is especially important in patients with schizophrenia since these patients are already vulnerable to obesity and also because of the additional risk of weight gain associated with antipsychotic treatment, especially with the atypical antipsychotics. Patients suffering from schizophrenia who participated in a 3-month physical conditioning program showed improvements in weight control and reported increased fitness levels, exercise tolerance, reduced blood pressure levels, increased perceived energy levels, and increased upper body and hand grip strength levels. ⁵ Thirty minutes of exercise of moderate intensity, such as brisk walking for 3 days a week, is sufficient for these health benefits. Moreover, these 30 minutes need not to be continuous; three 10-minute walks are believed to be as equally useful as one 30-minute walks | |
| Translate the following words into French | |
| 1/ to alleviate | |
| 2/ social withdrawal | |
| 3/ weight gain | |
| 4/ blood pressure | |
| 5/ brisk walking | |

Health benefits from regular exercise that should be emphasized and reinforced by every mental health professional to their patients include the following:

- 1. Improved sleep
- 2. Increased interest in sex
- 3. Better endurance
- 4. Stress relief
- 5. Improvement in mood
- 6. Increased energy and stamina
- 7. Reduced tiredness that can increase mental alertness
- 8. Weight reduction
- 9. Reduced cholesterol and improved cardiovascular fitness

Mental health service providers can thus provide effective, evidence-based physical activity interventions for individuals suffering from serious mental illness. Further studies should be done to understand the impact of combining such interventions with traditional mental health treatment including psychopharmacology and psychotherapy.

| List the types of physical exercise you get on a regular basis. | | |
|---|--|--|
| | | |
| | | |
| | | |
| What exercise do you do every day, and what exercise do you do each week? | | |
| | | |
| | | |

Footnotes

The authors report no financial or other affiliation relevant to the subject of this letter.

References

- 1. Richardson CR, Faulkner G, and McDevitt J. et al. Integrating physical activity into mental health services for persons with serious mental illness. Psychiatr Serv. 2005 56:324–331. [PubMed]
- 2. Callaghan P.. Exercise: a neglected intervention in mental health care? J Psychiatr Ment Health Nurs. 2004;11:476–483. [PubMed]
- 3. Guszkowska M.. Effects of exercise on anxiety, depression and mood [in Polish] Psychiatr Pol. 2004;38:611–620. [PubMed]
- 4. Peluso MA, Andrade LH.. Physical activity and mental health: the association between exercise and mood. Clinics. 2005;60:61–70. [PubMed]
- 5. Fogarty M, Happell B, Pinikahana J.. The benefits of an exercise program for people with schizophrenia: a pilot study. Psychiatr Rehabil J. 2004;28:173–176. [PubMed]