Physical exercise for pathological gamblers
Exercício físico para jogadores patológicos

Dear Editor,

Pathological gambling (PG) is characterized by persistent and recurrent gambling behavior despite obvious psychological, financial, and interpersonal negative consequences. Diagnostic criteria are based on criteria for substance dependence, and PG is considered a model of behavioral dependence. Physical exercise has been proposed as an adjuvant therapy for patients undergoing substance dependence treatment. However, there is no study of its efficacy in PG or other behavioral dependencies.

We report here on the impact of an exercise program in the maintenance of PG patients undergoing outpatient treatment. Treatment consisted of 12-15 cognitive-behavioral therapy (CBT) group sessions and psychiatric treatment of comorbidities. The 4-week exercise program included one evaluation session followed by seven (twice-a-week) 45-minute sessions (15-minute stretching plus 30-minute running, aiming at 65% of the maximum heart rate for age) supervised by 2 physical educators and a psychiatrist. Nine out of 15 patients who had completed CBT within the prior 2 weeks or who had attended at least 60% of programmed sessions accepted to participate and 8 (5 men and 3 women, mean age = 43.8 years) completed the program.

Clinical status was evaluated by the 10-item Gambling Follow-up Scale (GFS) at baseline and at the end of the exercise program. Scores below 29 suggest active PG, scores between 29 and 33 suggest partial remission, and scores above 33 suggest complete remission. Gambling craving was evaluated by a visual-analog scale immediately before and after each exercise session.

At baseline, two patients presented acute gambling behavior (scores of 18.3 and 25.3), two patients were in partial remission (scores of 30.3 and 32.8), and four were in complete remission (scores ranging from 37.5 and 43.1). An analysis with Wilcoxon test demonstrated a significant variation of the GFS scores after the 4-week program (Z = -2.52; p = 0.012), with GFS scores improving for all patients. Except for one patient who remained in the acute phase (GFS = 27.3), all other subjects either reached or remained within the range of complete remission (scores between 34.5 and 43.2). Gambling craving also varied significantly before and after each exercise session (Z = -2.17; p = 0.030). Then, we calculated the mean variation of gambling craving pre- and post-exercise sessions (delta-craving). A correlation analysis between delta-craving and GFS total scores at baseline and at the end of the program showed that although delta-craving did not significantly correlate with initial GFS score (r = 0.325; p = 0.43), the correlation with final GFS score was significant (r = 0.743; p = 0.035). In a further analysis in which we compared delta-craving with each final GFS item we showed significant correlations only for items directly associated with gambling (frequency, time, expenditure, and emotional stress – r varied from 0.727 to 0.732 (p varying from 0.041 to 0.039).

Items evaluating family, leisure and financial problems did not present significant associations. However, such correlations must be cautiously interpreted, considering the shortcomings of multiple comparisons in a small sample size.

We concluded that after a standardized exercise program pathological gamblers were less likely to gamble. This reduction was specifically related to reduction of the gambling behavior per se. Controlled studies in larger samples are needed to compare exercise efficacy with other craving management strategies. However, exercise seems to be a promising strategy in PG treatment and potentially applicable in other behavioral dependences.

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Disclosures

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Note: AMJO = Gambling Outpatient Unit of the Department and Institute of Psychiatry of the Universidade de São Paulo.

For more information, see Instructions to Authors.

References

Dear Editor,

Compulsive buying (CB), or Oniomania (from the Greek: oné – shopping, mania – frenzy), is characterized by excessive preoccupations and desire to purchase objects, and unrestrained shopping to the point of personal suffering and financial hardship. The criteria proposed by McElroy are the most used until nowadays, since both DSM and ICD have not proposed operational criteria for this syndrome, which is classified as an impulse control disorder not otherwise specified. If CB was officially recognized, it would become the most common impulse control disorder, with prevalence estimates ranging from 2 to 8% of the adult population.

Cognitive behavioral therapy (CBT) has shown promising results for CB with significant decrease of shopping time and episodes compared to a waiting-list. However, this and other CBT programs for CB do not encompass, or at least have no described cognitive restructuring techniques aiming at cognitive distortions specific to shopping behavior. Keeping this in mind, we developed a CBT program for CB aiming at identifying and changing cognitive patterns that influence shopping behavior, raising awareness of high risk situations. Table 1 summarizes the content of the 20 weekly group sessions. Sessions 6, 7 and 8 are dedicated to cognitions most commonly related to shopping among compulsive buyers: shopping as a way of coping with emotions, shopping as a way of building an identity, and “all or nothing” type of thinking applied to shopping.

The purpose of this communication is to report the outcome of our pilot CBT group with an emphasis on cognitive restructuring for CB. The group consisted of nine individuals, only one male, mean age of 41.8 years-old, only three married, all meeting McElroy’s criteria for CB. Psychiatric comorbidity was assessed by the Mini International Neuropsychiatric Interview (MINI). Seven out of the nine participants presented a current depression, and two of them met criteria for bipolar disorder, but their loss of control over shopping was not better explained by their mood disorders, since shopping bouts also occurred during periods of euthymia.

Participants answered the Yale-Brown Obsessive-Compulsive Scale-Shopping Version (YBOCS-SV), at the beginning and at the end of treatment. The YBOCS-SV is a 10-item scale; the first five questions are added up to produce a cognitive score (COG), and the last five ones produce a behavioral score (BEH). COG and BEH scores can be added to produce one last total score (TOT). TOT varies from 0 to 40, indicating the severity of the shopping psychopathology.

We used Wilcoxon Signed Ranks tests to compare pre and post-treatment scores. COG (pre-treatment median/post-treatment median = 12/6, Z = -2.68, p = 0.007), BEH (10/6, Z = -2.67, p = 0.008) and TOT (22/11, Z = -2.67, p = 0.008) significantly decreased after CBT treatment – see Figure 1.

The conclusion is that group therapy with an emphasis on detection of specific shopping cognitive distortion and restructuring may help compulsive buyers in dealing with both cognition and shopping behavior. Controlled studies are warranted in order to determine the generalizability of the present findings and to compare different approaches to this troublesome, and yet poorly recognized disorder.

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**Table 1 - Group CBT and cognitive restructuring for compulsive buying**

<table>
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<tr>
<th>Sessions</th>
<th>Content</th>
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<td>Week 1</td>
<td>Introducing the cognitive-behavioral model</td>
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<td>Week 2</td>
<td>Pros and cons of compulsive versus sober shopping</td>
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<td>Week 3</td>
<td>Stages of change model</td>
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<td>Weeks 4 and 5</td>
<td>Why shopping has become a problem</td>
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<td>Weeks 6, 7 and 8</td>
<td>Most common misconceptions about shopping</td>
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<td>Week 9</td>
<td>Learning to differentiate compulsive from regular shopping</td>
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<td>Week 10</td>
<td>Shopping: pleasant or unpleasant?</td>
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<td>Week 11</td>
<td>Understanding domestic economy and financial planning</td>
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<td>Weeks 12 and 13</td>
<td>Shopping and debts: negotiating with creditors</td>
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<tr>
<td>Weeks 14 and 15</td>
<td>Relapse prevention: planning the future</td>
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<td>Weeks 16 and 17</td>
<td>Shopping and negative emotions: dealing with negative thoughts</td>
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<td>Week 18</td>
<td>Shopping and problem solving</td>
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<tr>
<td>Week 19</td>
<td>Shopping and the circle of life</td>
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<tr>
<td>Week 20</td>
<td>Future directions and closure</td>
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**Figure 1 - YBOCS-SV pre and post-treatment**
Internet addiction (IA) is the lack of ability to control Internet use and involvement leading to progressive loss of control. With negative social effects, Internet addicts use the Web as a social and communication tool, once they experience higher levels of pleasure and satisfaction when online than in real life.

We report the case of F., 15, from São Paulo, an only child who had been confined at home for 2 years for being online (average, 12-18 hrs/day, maximum, 38 hrs uninterruptedly). In addition to excessively worrying about the Internet (Criterion #1), he also showed a constant need for increasing online time (Criterion #2) and eventually lost control over use (Criterion #3). With his parents split, he stopped going to school for 2 years (Criterion #6) and would not leave his room, where he got online. The Internet gave him relief by providing an escape from his life problems (Criterion #8). Irritated when his mother unplugged the computer (Criterion #4), he physically attacked her three times. In the past, showing depression, he was hospitalized due to his aggressiveness after oral administration of fluoxetine.

Brought in for refusing treatment, he showed dysphoric mood, grandiose ideation, logorrhea, compromised pragmatism, and no critical sense about his condition.

By applying CY-BOCS, concerns about contamination, excessive hand washing, ritualized toilet, nose-cleaning compulsion, and clothing checking (consuming 2 hours a day) were revealed, although there was no critical sense about them.

During hospitalization, bipolar disorder (BD), attention-deficit/hyperactivity disorder (ADHD) with predominance of inattentiveness, obsessive-compulsive symptoms, simple phobia, and impulse control disorder, NOS (IA) were hypothesized. He had previous family history of alcohol and drug abuse, BD, and depression. F. was discharged after 14 days, showing mood stabilization with divalproate sodium 750 mg/day and partial critical sense about his problem. Outpatient treatment was indicated. We cannot report the progression of Internet use-related behavior following hospitalization because the patient dropped out treatment.

Many adolescents are difficult to treat and highly resistant to treatment, once the Internet is disseminated in this age group as a habit incorporated to school life and social relationships (e.g., Orkut). The Web has become an anonymity and comfort zone, where the delay in communication favors the creation of better forms of self-expression, such as the possibility of creating new personal characteristics. Thus, for individuals having social anxiety or low self-esteem the perspective of manipulating reality turns the

References

Table 1 - Internet addiction. Diagnostic criteria by Young

Respondents who answered “yes” to five or more of the criteria were classified as addicted (Dependent).
1. Do you feel preoccupied with the Internet (think about previous online activity or anticipate next online session)?
2. Do you feel the need to use the Internet with increasing amounts of time in order to achieve satisfaction?
3. Have you repeatedly made unsuccessful efforts to control, cut back, or stop Internet use?
4. Do you feel restless, moody, depressed, or irritable when attempting to cut down or stop Internet use?
5. Do you stay online longer than originally intended?
6. Have you jeopardized or risked the loss of significant relationship, job, educational or career opportunity because of the Internet?
7. Have you lied to family members, therapist, or others to conceal the extent of involvement with the Internet?
8. Do you use the Internet as a way of escaping from problems or of relieving a dysphoric mood (e.g., feelings of helplessness, guilt, anxiety, depression)?
cyberspace into a new window to the world, offering comfort and relief. Those showing distractibility or accelerated thinking, in turn, may find encouragement in the Internet that allows them to focus their attention more accordingly to the speed of their ideas.¹

Several studies indicate an association of IA with other psychiatric disorders that, when present as comorbidities, predisposes, aggravates, or facilitates excessive Internet use, thereby hampering the identification and approach of the problem. The failure in recognizing it may negatively affect prognosis.²⁻⁴

This patient’s history shows the disorder had been long standing, although it was never correctly diagnosed, which led to major social impacts for not receiving appropriate treatment.

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Dear Editor,

The presence of parasomnias in the pediatric clinical practice is quite common and requires attention and knowledge of the general pediatrician and the clinical psychiatrist. An important point of the treatment is the education and reassurance of the parents, whose objective is to explain that such conditions are generally benign, with no significant complications and of limited course³.

With regard to the importance of these conditions, we have read Guzman and Wang’s² letter with utmost pleasure, since it was published in a psychiatry journal allowing psychiatrists to be more alert about sleep disorders.

However, we noted some points that remained unclear and we think that it is important to clarify them, to better inform and teach clinical psychiatrists who will be faced with these disorders in their offices.

First of all, we reinforce that the presence of a psychopathology is rare in children with sleep terrors; it is often a benign and time-limited condition.

More recent data than that referenced in the letter have clarified the question about the real prevalence of sleep terror in children. The estimation of the prevalence is difficult, because it may be hard for parents to establish a difference between sleep terrors and somnambulism in questionnaires, once questions ask about retrospective symptoms and refer to both parasomnias in the same question. Taking that into account, numbers vary from 1.3% to 27%³ or even 0 to 40%⁴.

It is not clear if the statement “As a result, these disorders are more common in children who have more delta sleep” means that children have more delta sleep, which is true, or if those children with more delta sleep would develop more common episodes of parasomnia. Indeed, recently published data show that children with parasomnia may have low delta power in the first sleep cycle and slow decline of delta power in successive sleep cycles, suggesting a chronic inability to sustain slow-wave sleep⁵, but no data affirm that the increase of delta sleep per se would be a risk factor.

The treatment orientation indeed does not include age as a factor when initiating medication; this decision is taken merely based on the severity of the disorder. Of note, sometimes it is difficult for parents to accept giving their little children controlled medication (as benzodiazepines) although they have been prescribed by their doctor, however this does not lead to serious consequences³.

In order to prevent psychiatrists from giving selective serotonin reuptake inhibitors to their cases of sleep terror, we must emphasize that the first choice of pharmacological treatment is a benzodiazepine or a tricyclic antidepressant. The time of treatment must be at least 3 months and if a good response is achieved, treatment should not last for more than 6 months. We have had excellent outcomes in our outpatient clinic ambulatory with the use of clonazepam, 1 to 5 drops (0.125 mg to 0.625 mg) at bedtime.

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References
Bipolar patients treated for hepatitis C with interferon alpha

Dear Editor,

Bipolar disorder is a common disorder which affects approximately 1% of the population and is associated with chronicity and severity features such as low remission rates, high prevalence of clinical and psychiatric comorbidities and a significant functional and cognitive impairment. Infection with hepatitis C virus (HCV) is a chronic blood-borne disease, with an estimated general prevalence of 1-2.4%. Moreover, this infection affects 10% to 15% of bipolar disorder patients.

Interferon-alpha treatment is used in combination with ribavirin in order to eradicate HCV infection promoting viral clearance rates of 54% to 56%. Despite these clinical benefit, antiviral treatment of chronic hepatitis C with interferon-alpha is associated with several neuropsychiatric side-effects such as psychosis, major depression, and neuropsychological dysfunction. In addition, psychiatric comorbidity has been used as an exclusion criterion in several large HCV clinical trials.

As a consequence, the antiviral treatment of HCV-infected mental disorder patients is an understudied field, resulting in a major unmet clinical need.

Case report: C is a 44-year-old man, married, with a twenty-year history of bipolar disorder (BD) and chronic hepatitis C, genotype 1, with unknown path of infection. His affective disorder is characterized by predominance of manic phases and has had a favorable response to lithium carbonate 900 mg/day. He reported a total of four manic episodes in his life, including one with psychotic features, but has been euthymic for the last two years. The patient and his family decided to treat the chronic hepatitis C and accepted the conditions to remain in the psychiatric treatment and to attend all medical appointments. He initiated the treatment with pegylated interferon-alpha 180 μg/wk plus ribavirin 1.200 mg/day. During antiviral therapy he only presented fatigue and non-significant weight loss, being able to complete the treatment with no occurrence of psychiatric symptoms.

Discussion: Clinicians, both psychiatrists and hepatologists, are often faced with the dilemma of treating HCV-infected individuals with bipolar disorder. Although current or previous bipolar disorder is still considered a controversial issue for antiviral treatment with interferon-alpha, the ability of these severely mentally ill patients to tolerate side-effects and adhere to HCV treatment has been shown. It has been demonstrated that several factors would influence patient selection for HCV treatment: the clinical course of the bipolar illness, compliance with medications, frequency of previous hospitalizations, and the presence of a functional emotional and psychosocial support system. In addition, some important topics must be continually reinforced by the psychiatric team when treating patients with severe mental illness: 1) the need for education about the potential to achieve the cure of hepatitis; 2) avoidance of liver toxins, including drug abuse; 3) information about the potential occurrence of neuropsychiatric side-effects, including the fact that these can be treatable and reversible. Another important topic is that an informed-consent form should be applied. The Brazilian Health Ministry Protocol requires that psychiatric patients with chronic hepatitis C should only be treated with interferon if they are in a stable condition, having regular psychiatric patients with chronic hepatitis C should only be treated with interferon if they are in a stable condition, having regular psychiatric visits to attend all medical appointments. The patient and his family decided to treat the chronic hepatitis C and accepted the conditions to remain in the psychiatric treatment and to attend all medical appointments. He initiated the treatment with pegylated interferon-alpha 180 μg/wk plus ribavirin 1.200 mg/day. During antiviral therapy he only presented fatigue and non-significant weight loss, being able to complete the treatment with no occurrence of psychiatric symptoms.

We have to emphasize that not all bipolar patients can be treated for their chronic hepatitis C; only those who are highly motivated and engaged in an intensive psychiatric care program are prepared for antiviral therapy.

It cannot be forgotten that further prospective, controlled studies, randomized by age, gender, genotype, and psychiatric group are needed to better investigate the presented issues.

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Note: UFBA = Universidade Federal de Bahia; EBMSB = Escola Bahiana de Medicina e Saúde Pública; CNPq = Conselho Nacional de Pesquisa e Desenvolvimento.  
For more information, see Instructions for authors.

References