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brief report

Bulimic behaviours in female adolescent endurance runners

Comportamentos bulímicos em atletas adolescentes corredoras de fundo

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Abstract **Objective:** The aim of the present work is to evaluate bulimic behaviors among female adolescent endurance runners.
Methods: From a total of 40 athletes affiliated to the Track and Field Federation of Rio de Janeiro, 17 female teenager endurance runners (age: 16±1,8 years) were examined. The instrument used to investigate bulimic behavior and its gravity was BITE (Bulimic Investigatory of Edinburg).
Results: The results showed that 35,6% of the athletes (6 of them) had scores above the limit of normality (=10) 29,4% (4 of them) showed a *non-usual* pattern (between 10 and 19). It was found one case with score above 20 indicating a problem. With respect to the seriousness, values above 5 in the scale BITE are considered significant and a case of this type was found in the analyzed sample.
Conclusion: Since some non-usual pattern were found and also in at least one case a major problem was indicated by the high score it was concluded that more studies are necessary, and also the development of an index to gauge the gravity of the problem in order to make in time preventive measures.

Keywords Eating disorders. Bulimia. Athletes.

Resumo **Objetivo:** Avaliar a presença de comportamentos bulímicos e sua intensidade entre atletas adolescentes do sexo feminino corredoras de fundo.
Método: De um total de 40 atletas adolescentes (16±1,8 ano), registradas na Federação de Atletismo do Rio de Janeiro, foram estudadas 17 meninas corredoras de fundo. O instrumento utilizado para investigar comportamentos bulímicos e sua gravidade foi o BITE (*Bulimic Investigatory of Edinburg*), um questionário auto-aplicável, em sua versão em português.
Resultados: Os resultados apontaram que 35,6% das atletas (n=6) apresentavam escores acima do limite de normalidade (=10) e 29,4% (n=5) padrão *não usual* (entre 10 e 19). Foi detectado um caso com escore superior a 20, indicando presença do problema. No que se refere à gravidade, valores acima de 5 na escala de gravidade do BITE foram considerados significativos, totalizando na amostra apenas em um caso.
Conclusão: Tendo em vista a detecção de padrões não usuais e mesmo um caso de maior gravidade indicado pelo alto escore encontrado, tornam-se necessários estudos mais abrangentes junto ao segmento focalizado de modo a subsidiar medidas preventivas. Os resultados indicam, ainda, a necessidade de alertar e informar familiares e profissionais envolvidos no trabalho junto a essas adolescentes sobre o perigo potencial dos comportamentos identificados.

Descritores Transtornos do comportamento alimentar. Bulimia nervosa. Atletas.

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Introduction

The increase in the prevalence of anorexia nervosa and bulimia nervosa has been highlighted in the last years.[1] People with these disorders present excessive concern with weight and diet, dissatisfaction with, and distortion of their image. Young women, specifically adolescents, constitute the group at the highest risk.

Regarding bulimia nervosa, it is estimated a 3% to 5% prevalence in the female adolescent and young adult population.[2-5] Subjects with bulimia nervosa consume large quantities of food, especially when submitted to stressing situations, followed by compensatory behaviors as to prevent weight gain and relieve the guilt and the shame triggered by the lack of control on the eating.[6] Due to the 'secret' character of this ritual, bulimia nervosa is difficult to diagnose, especially in its initial phase, what hampers early prevention and treatment.[6]

The prevalence of Eating Disorders among athletes is not sufficiently known, but some available studies showed an increased frequency in certain sports, considering, above all, the emphasis in weight control to which athletes are submitted.[7-13] In the attempt to maintain the body weight within the patterns established for the sport group they participate, some athletes impose restrictive alimentary habits to themselves, and may cause severe harm to their health.[14]

Within the scope of this study, our purpose was to contribute to dimension bulimia nervosa and precursory behaviors in adolescent endurance runners, a stratum deemed at high risk for the appearance of eating disorders.[15]

Method

The sample was composed by 17 adolescents (15.9±1.8 years) selected in the reference population, constituted by 40 adolescent athletes who, at the time of the study, were registered in the Track and Field Federation of Rio de Janeiro - Federação de Atletismo do Rio de Janeiro (FARJ). The inclusion criteria of the study were:

- Being training under the supervision of an athletics coach, for a minimum period of two years.
- Being a marathonist or semi-marathonist (distances of 800 meters or more).
- Having obtained at least the 5th place in a recent juvenile championship in the state of Rio de Janeiro.

Out of 40 federated adolescent athletes, only 20 met all mentioned criteria and of those, three refused to participate in the study.

In order to assess bulimic behaviors and their intensity it was used the Bulimic Investigatory Test Edinburgh (BITE),[16] in its Portuguese version.[17]

Measures of cutaneous folds (mm, CESCORF), height (m) and body mass (kg) were performed. The percentage of body fat (%G) was estimated based on the body density obtained with the equation of Withers et al[18] (1987).

Results

It was observed in the studied sample that the values related to body mass (49.3±5.2 kg), body fat (%G=22.0±4.2 %) and BMI (BMI=18.8±2.0 Kg/m^2) were within healthy patterns for the age range, and are below values found in non-athlete adolescents. This fact stems from the studied athletic specialty, determining along time a percentage of body fat lower than that found in non-sportists.[19]

Despite the verification of normal patterns for body mass and fat in the group of adolescent athletes, the BITE results show the presence of risk behaviors or even the presence of bulimia nervosa.

BITE results

It was verified that 35.6% of athletes had scores above the normality limit (=10). Of these percentage, 29.4% showed a non-usual pattern, which corresponds to scores from 10 to 19, indicating a risk behavior. In this sample it was identified one case (5.9%) – with a value above 19 – indicative of a strong possibility of meeting diagnostic criteria for bulimia nervosa. These results are near to those found in other studies which employed BITE,[5,14] although the methodological differences do not authorize precise comparisons, and we may also highlight, in the specific case of our study, that it is inadequate generalizing its findings to other groups or segments. Therefore, we may highlight as a limitation of this study the absence of a control group, what restricts the possibility of more accurate comparative analyses and even the correlation of the results with the analyzed sport modality. However, such a limitation is due to the study's objective which, at this stage, was circumscribed to a sectional exploratory analysis focused on the detection of the prevalence of behaviors in the studied group, without the intention of performing comparative analyses or generalizing its findings.

Regarding the severity scale, except for that case, the remaining ones are within the pattern, that is, they reach scores equal to or lower than five.[14]

Among the findings, stood out several answers suggestive of characteristic behaviors of bulimia nervosa, such as:

1. Fear (fright) of putting on weight and very rapid intake of great amounts of food (58.8%)
2. Fasting practices for one complete day (52.9%)
3. Habit of ingesting food when not observed (52.9%)
4. Concern with the lack of control over the eating (47.1%)
5. Feeling guilty when ingesting food (41.2%)
6. Obsessive thoughts about food (29.4%)

According to the results, we found that the studied segment represents a group at risk for cases of bulimia nervosa, considering the presence of concern with weight control and the use of inadequate practices for maintaining it within the expected range. For that reason, subjects resort to practices, above all restrictive, standing out fasting, practiced parallelly with intense physical activity, what can lead to the installation of severe health problems.

On the other pole, stands out the lack of control about the food intake as well as feelings associated to these practices – guilt, shame, fear, anxiety – emotional characteristics present in bulimia nervosa and which represent a psychical suffering that cannot be neglected, especially in this vulnerable range. Further-

more, we may consider the synergy between the mentioned aspects as a highly favorable context for the installation and worsening of other psychical alterations, contributing to the comorbidity, which is a characteristic that intensifies and worsens the course of eating disorders, hampering its management.

Conclusions

The screening performed in this study points to the presence of risk behaviors for the installation, or even the presence of bulimia nervosa, although with low intensity in the evaluated segment.

Professionals who work with this segment need to be informed and trained for the identification and for the integrated work needed to the management of bulimia nervosa. Early detection and intervention are essential measures not only for the maintenance of the performance, but of the health condition of athletes.

Moreover, we propose the development of other studies as the methodology of this study does not allow the generalization of its findings for other groups, according to its already cited limitations. However, we may mention that with the consolidation of our research line and the definition of more comprehensive studies, these limitations are being remedied.

Furthermore, it is urgent the incorporation of new approaches, among them, the qualitative one, as to advance not only in the measuring, but also in the understanding of the multidimensional genesis of eating disorders, which are, even nowadays an enigma under several aspects.

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