



A BRIEF LITERATURE OVERVIEW ON ORTHOREXIA NERVOSA – ONE NEW REPRESENTATIVE IN CLUSTER OF EATING DISORDERS

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ABSTRACT:

The neologism “orthorexia”, first described in 1997 by Stephen Bratman in the Yoga Journal, has expanded over the years by adding the term “Nervosa”, coined to indicate a potential new eating disorder - Orthorexia Nervosa (ON). In essence, ON is manifested with excessive concern for a healthy diet leading to attracting all attention to food, thus developing constant and disturbing obsessive thoughts and stereotypical behavior (fixation). People with orthorexic eating habits pay too much attention to the quality of the food consumed, in contrast to the well-studied to date Bulimia nervosa and Anorexia nervosa, where the focus is entirely on the amount of food consumed. This brief literature review attempts to clarify the existing biological and demographic aspects of ON, dietary risk factors, and other pre-conditions for the occurrence of this disorder. To date, there are several tools available to diagnose ON, the most widely used of which is the Ortho-15 questionnaire. Given the growing interest in healthy lifestyles, attention should be paid to the problem of orthorexic eating behavior in the public sphere, including the development of targeted activities for primary and secondary prevention.

Keywords: Orthorexia nervosa, eating disorder, Ortho-15, orthorexic nutritional behavior,

INTRODUCTION

The term “Orthorexia” is a neologism, first used by American physician Steven Bratman in an article in Yoga Journal (1997) [1]. In Greek language the meaning is “correct appetite” - ορθο - (ortho-correct, true, right) and ορεξις (-orexis, appetite). Bratman attempts to explain with this term the strange eating behavior of some of his patients, characterized by a pathological obsession (fix idea) to healthy eating. Bratman, together with David Knight, published in 2000 the book Health Food Junkies, which described and expanded this concept, adding to it the term “nervosa” created to indicate a possible new eating disorder - Orthorexia nervosa (ON). [2] A team of Italian scientists from La Sapienza University of Rome published in

2004 the first empirical study trying to develop a tool to investigate and measure the incidence of this condition [3].

Orthorexia nervosa manifests itself with excessive concern for a healthy diet, leading to the full attention to food, thus developing persistent and disturbing obsessive thoughts and stereotyped behavior (fixation) [4]. People with this eating behavior pay too much attention to the quality of food consumed, unlike the well-studied Bulimia nervosa and Anorexia nervosa to date, where the focus is entirely on the amount of food consumed [5]. Patients with ON spend at least 3 hours each day analyzing their own diet. They are engaged most of their time in the search for food and prepare it according to the technique they consider to be the healthiest; they prepare foods with the best possible composition and are fixed in striking the right balance between nutrients and their optimal composition; avoid eating at restaurants or bars unless they have a special menu suitable for them; avoid food products of foreign origin unless they examine the detailed qualitative composition of the product; feel guilty and/or anxious about eating junk food. The described habits and behaviors clearly indicate that ON is a psychological condition that can cause suffering and disorders in daily life leading to the social isolation of the individual.

To date, there is no standard accepted definition of ON, the diagnostic criteria are still debatable, and the psychometric tools used reveal some methodological shortcomings [6]. However, the literature has so far managed to elucidate 2 main characteristics present among the ON diagnostic criteria:

(a) an obsessive focus on nutritional practices that are thought to promote optimal well-being through healthy eating (with inflexible eating rules, repetitive and fixed/constant eating practices, obsessive behavior);

(b) subsequent, clinically relevant, impairment (e.g. medical or psychological complications, major distress, and/or impairment in important areas of functioning) [7].

Biological and demographic aspects

Age

Currently there are mixed findings regarding the role

of age as a potential risk factor for the onset of ON [8], but most studies appear to indicate younger age as riskier. The interpretation of the age-onset of ON should be interpreted with caution, since in most of the studies the samples collected are mostly students and collegers, and more investigations are needed to analyze the other age groups.

Sex/gender

With regard to gender distribution, some studies have found that women are at higher risk of experiencing orthorexic eating behavior [9-11], but this may be explained by the fact that most of these studies are sampled mainly from women. In other studies the results show that this condition is more common among men [12, 13]. In one of the most recent published systematic reviews on the topic, a meta-analytic summary was made concluding that orthorexic tendencies are relatively homogeneously distributed between the two sexes, but with a slightly clearer expression among women [14].

Family environment and education

The relationship between environmental influences, education, and the emergence of ON is also controversial. ON may be more common among higher-income earners as they have the greater financial capacity to purchase high-quality ON-specific foods, as well as greater access to nutrition and dietary knowledge. [15].

Nutritional risk factors

It is logical to assume that certain restrictive diets (vegetarianism, veganism) can be considered as predictors of orthorexic behavior. Few studies have examined the link between different diet regimens and the occurrence of orthorexic eating behavior [16 - 19], with most reports clearly indicating that vegetarianism and veganism are at increased risk of ON.

Some studies have found that people with a past history of an eating disorder are more likely to develop ON than those who have never had an eating disorder [20, 21]. From here, we can hypothesize that the ON state could fit into one continuum as a variation of any of the other eating disorders, but it is also possible to classify it as a self-contained nosological unit of the same cluster.

With regard to BMI, most studies do not find a clear correlation between lower BMI and the likelihood of ON occurrence [22, 23].

Other risk factors and prerequisites for the occurrence of ON

Systematic reviews of the literature indicate another half dozen risk factors associated with the occurrence of orthorexic eating behavior [15].

The relationship between the use of social networks (Instagram, Facebook, etc.) and the risk of ON occurrence has been examined [24]. According to the authors of these studies, the risk of orthorexic behavior may be increased through selective exposure to certain accounts and pages by consumers. Selective monitoring of certain food accounts can lead consumers to believe that extreme healthy eating is more normative than it really is.

Other factors and prerequisites associated with an

increased risk of orthorexic eating behavior are considered, such as: engagement with exercise; use of alcohol, tobacco and other psychoactive substances; certain professions; eating habits, as well as other concomitant mental and somatic diseases [25]. However, the available literature does not yet have sufficient empirical power to prove that the aspects described are sufficiently reliable causal factors related to ON. Samples of different ethnic and anthropography backgrounds have been collected in different studies, but it is nevertheless necessary to examine more closely the cultural aspects of different nations and the resulting diversity of socio-cultural patterns of behavior and lifestyle, as well as the possibility of certain their manifestations to mediate the onset of ON.

Obsessive-compulsive tendencies

Given that ON is characterized by excessive food concern and ritual preparation of meals, it is not surprising that obsessive-compulsive behavior could play a significant role in the onset of this condition. Most studies have found a clear link between obsessive-compulsive attitudes on the one hand and the risk of occurrence and a higher incidence of ON on the other [26-31]. The obsessive thoughts of pollution and washing compulsions, as well as the obsessions of food decoration (e.g. dressings) clearly correlate with the emergence and maintenance of orthorexic eating behavior.

Diagnosis

To date, there are several tools available for the diagnosis of ON, the most used of which is the Ortho-15 questionnaire created and developed as early as 2004-2005 [3,32]. The tool consists of 15 questions, and the answers are based on a 4-point Likert scale (always, often, sometimes, never). After summing the scores, higher scores indicate a more moderate orthorexic tendency, while lower scores are an indicator of orthorexic behavior. Many adaptations have been made to different languages, and despite many criticisms of the validity and reliability of the tool, ORTO-15 is currently the most commonly used ON symptom screening questionnaire [33-35].

Currently, in addition to Ortho-15, there are 5 additional questionnaires for screening and diagnosis of Orthorexia nervosa - BOT, EHQ, DOS, BOS, TOS, but none of them, used alone, are able to cover and categorize all aspects of orthorexic nutrition behavior [36-38, 28]. Some additional questionnaires, such as MMPI, can also be used to assist with the aforementioned screening tools to establish the personality traits of individuals with orthorexic eating behavior.

Treatment

To date, studies on the effectiveness of treatment for ON have not been identified in the literature, but some suggestions for good practice have been provided. The ideal therapeutic approach involves a multidisciplinary team of physicians, psychotherapists and nutritionists so that a combination of medication, cognitive-behavioral therapy and psycho-educational programs can be delivered on an outpatient basis. In the case of significant weight loss and

malnutrition, the intervention of specialists with experience in these aspects is also required.

Individuals with orthorexia may have a tendency to reject medication, considering it to be 'unclean', 'unnatural', substances. Therefore, psychotherapeutic interventions should be individualized based on the patient's symptoms, recognizing that treatment goals should focus not only on what patients eat but also on how they buy and prepare the food they consume. Incorporating habit-changing training can be successful in treating the obsessive aspects of orthorexia.

CONCLUSION

Currently ON is not yet included in the current classifications of somatic, mental, or behavioral disorders de-

scribed in ICD-10 or DSM-5. It is still debatable whether the phenomenon is not a variant of another eating disorder, an undetectable symptom of another disease, or whether it is a separate nosological unit that deserves a separate place in the cluster of eating or obsessive-compulsive disorders.

Due to the lack of awareness of the described orthorexic nutritional behavior, it is necessary for medical staff (especially primary care physicians and nurses) to receive the necessary training to be able to adequately recognize and identify it within the framework of outpatient care.

Given the growing interest in healthy lifestyles, the issue of orthorexic eating behavior in the public space, including the development of targeted primary and secondary prevention activities, must be addressed.

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