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Orthorexia nervosa in society

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Summary

Orthorexia nervosa is a relatively new health problem, which explains limited knowledge about the phenomenon in society. Only a few empirical studies on the course of this disorder, its characteristics and prevalence have been conducted. Therefore, it is not possible to precisely estimate the scale of the phenomenon. Nevertheless, there are tools available to assess the risk of orthorexia, and methods for its treatment. It is necessary to do further research in this disorder and to educate society about its risk factors. This can translate into an improved diagnosis (and thus help to determine the scale of the phenomenon), and support the development of uniform diagnostic criteria.

Keywords: Orthorexia nervosa; Nutrition; Health

Prevalence

Orthorexia is a new problem and therefore there is little empirical research on the course of this disorder, its clinical picture and prevalence. The studies so far undertaken were conducted on small groups, and the results were inconsistent. In addition, it is difficult to compare the results, as different criteria for the diagnosis of orthorexia have been used.

In the world scientific literature, no research can be found that would answer the question about the world prevalence of orthorexia. However, there are many studies on the prevalence of this disorder on a local scale. Donini et al. examined the prevalence of orthorexia in a group of 404 volunteers (employees of the Institute of Biochemistry at the Sapienza University, employees of the Italian Air Force, Sat 2000 television employees, Plinio Scientific High School students and parents of the fourth grade students from San Giuseppe Junior School). The study excluded persons under 16 years of age, due to their insufficient autonomy in the choice of meals. Participants to the study were evaluated in terms of their eating patterns and obsessive-compulsive symptoms and phobias. Orthorexia was diagnosed in 6.9% of the respondents (n = 28). Prevalence was higher among men than women (11.3% vs. 3.9%). No differences were observed in BMI, marital status, number of children in the family, occupation and preferred sources of health knowledge. [1]

A study conducted in Turkey among 318 resident doctors of a hospital in Ankara showed prevalence of orthorexia at the level of 45.5%, with respondents' scores in the ORTO-15 test below 40 points. No gender or BMI differences were found. [2]

Another study from Turkey was carried out on a group of medical students and was based on the ORTO-11 questionnaire (ORTO-15 version after validation in the country). It showed prevalence of 1.9% for the range of 0-15 points scored in the test, and 57.5% for the range of 15-31 points scored. Higher rates were reported for men than women.

Studies from Hungary have shown that 56.9% of university students have a tendency for orthorexia. They also demonstrated a correlation between orthorexia, nutrition and disturbances in the perception of one's own body [3].

Diagnostics

So far no diagnostic test or uniform diagnostic criteria for orthorexia have been developed. The author of the term *orthorexia* created the first diagnostic tool - Bartman's Ortorexia Test (BOT). This test allows to determine whether acquired nutritional behaviors should be regarded as pathological or not. It is composed of 10 questions that can serve as a basis for the development of more detailed diagnostic criteria. Each question can be answered with YES or NO. An affirmative answer to more than 4 questions means respondent's incorrect attitude to eating that requires further examination by a qualified specialist. [4,5]

Lorenzo Maria Donini together with a team of the Sapienza University of Rome tried to develop a questionnaire that would assess people in terms of emotional and cognitive aspects. On the basis of Bartman's test, they created the ORTO-15 questionnaire consisting of 15 questions.

Respondents are obliged to answer each of them, according to their individual feelings, using a 4-point Likert scale. Answers indicating a tendency to orthorexia are given 1 point, and those indicating normal eating habits are given 4 points. A score below 40 points means a tendency to orthorexia. The ORTO-15 questionnaire has been validated and adapted for use in Italy and Turkey; it is also available in an English-language version. [4,6]

It seems that the key to an effective diagnosis, combined with early detection of the problem, is recognition of basic symptoms by the society. Recognizing symptoms of a health problem does not require specialist knowledge. It is enough to learn basic risk factors and have the ability to recognize risky behaviors, so that if a given person shows disturbing behavior, the society can quickly convince him or her of the necessity to seek specialist's advice. If medical intervention is provided quickly enough, the chances of treatment increase, and the risk of destruction of the organism through a restrictive diet decreases. It is worth emphasizing that knowledge of disease symptoms can be useful not only for persons from the high-risk group, but also for their families and persons from the same environment, e.g. work. The above arguments make orthorexia a public health problem.

Treatment

Treatment of orthorexia requires supervision of a multidisciplinary team, including psychotherapists and dieticians. However, each case should be treated individually. The basis for treatment should be a rational diet. In the first stage of treatment deficiencies should be compensated for with a diet rich in vitamins, micro and macro elements. Furthermore, a person suffering from orthorexia must realize that orthorexia is related to nutritional behavior, understand that the quality of a meal consumed is not the only factor influencing health, and learn how to eat without becoming obsessed with eating. Specialists recommend a cognitive-behavioral therapy combined with pharmacotherapy and the use of selective serotonin reuptake inhibitors (such as fluoxetine, sertraline and paroxetine). Other necessary elements of treatment are cooperation with patient’s immediate environment and nutritional education. [6]

It is worth noting that unlike other patients with nutritional disorders, patients suffering from orthorexia usually respond better to treatment because of their fears and the desire to achieve full health. [6]

In the treatment process, the role of family should be emphasized, as psychological support is particularly important in the case of psychosomatic illnesses. Family can control if the patient is following dietary recommendations after leaving a medical facility (if destruction of the organism led to hospitalization), i.e. at the time when the patients is no longer under control of

medical personnel. Importantly, recommendations for the patient should also be known to their closest family.

Orthorexia and other nutritional disorders

The International Statistical Classification of Diseases and Related Health Problems ICD-10 has identified the following eating disorders: anorexia nervosa, bulimia nervosa, overeating associated with other psychological disturbances, vomiting associated with other psychological disturbances, other eating disorders and unspecified eating disorders. [7]

From a psychological point of view, orthorexia has common features with anorexia nervosa. Most frequently it occurs in perfectionists, who get a sense of control over their body and health from having eating restrictions. They have specific rituals connected with meals, follow strict rules and have remorse when they cannot meet the requirements of the diet. Their self-esteem is strongly connected with nutrition. Both patients suffering from anorexia and orthorexia perceive symptoms of their disease as desirable or acceptable, which can contribute to low motivation for treatment. [3,5,8]

The most important difference between anorexia and orthorexia is that patients suffering from the latter do not focus too much on the amount or calorific value of consumed food, but on its quality and composition. The amount of food consumed is usually not reduced. Patients with orthorexia do not focus on losing weight and being slim, although their dietary restrictions often lead to weight loss. There is a correlation between anorexia and body mass index, but there is no relationship between the results of the ORTO-15 questionnaire and BMI. [2,3,5,8]

Similarly as in the case of other eating disorders (especially anorexia), family and the closest environment (family home, work, school, etc.) perform a key role in the treatment process. Eating disorders are usually psychosomatic, thus psychological support is crucial here.

Summary

Knowledge about the specificity of orthorexia in society is relatively low. The reason for this may be difficulties in determining the scale of the phenomenon, since available studies have been conducted only on a local (or national) scale. The problem seems to be underestimated and not taken seriously by society and specialists. Little knowledge about orthorexia in society has been confirmed in many studies. As compared with other health-related nutrition problems (e.g. anorexia or bulimia), orthorexia has received little media coverage. This state of affairs requires creating a social campaign informing about orthorexia, with particular emphasis on its risk factors.

Orthorexia is relatively difficult to recognize. This hinders empirical research on it and adversely affects the development of uniform diagnostic criteria. There is a strong need for educating the society in the area of eating disorders, with particular emphasis on orthorexia, and for conducting further, extensive research.

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