ORTHOREXIA NERVOSA: THE UNHEALTHY OBSESSION FOR HEALTHY FOOD

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ORTHOREXIA NERVOSA: THE UNHEALTHY OBSESSION FOR HEALTHY FOOD (Abstract): The aim of this paper is to inform about a form of food extremism which has been named orthorexia (right feeding). Although orthorexia nervosa has the clinical criteria for being structured as a unique, distinctive disease, with physical, psychological and social consequences, it is not yet present in the recent psychiatric classifications. There are still controversies whether it can be included in the eating or in the obsessive-compulsive disorders. Orthorexia represents a pathological obsession for healthy eating characterized by qualitative food restrictions, strict avoidance of foods considered “impure” and ritualized ways of eating. Orthorectics create a world of their own in which they are in control of the safety and purity of the foods they eat, searching for spirituality in the kitchen and feeling superior due to their choices, even if the results are the deterioration of health and social isolation. There is still need for population studies, based on valid and unanimously recognized criteria, in order to have the complete picture of this new pathology that has both medical and social origin. Key words: ORTHOREXIA, ORTHOREXIA NERVOSA, EATING DISORDERS.

The 21st century can be called the century of consumption. Food, especially low nutritional value food, is available at reasonable prices. The abundance of foods and technologies to produce food, the accumulation of precise data about the physiological effects of foods, and discussion over the mono-cultural traditional food practices, all lead to a crisis in food model. The result is an eating behavior characterized by anxiety and ambiguity that evolves on one hand to the glorification of traditional foods that carry symbols and on the other hand to a modern diet founded on an individual genetics invalidated by studies, but extrapolated to everybody (1).

Obesity is the calamity of the century. The prevalence of obesity is rising rapidly with fatal consequences for health, through suffering and costs. In the same time, we face the expectations of being healthy and normal weight in order to conform to the ideals of the society. The epidemic of obesity has led to a cultural change that stresses the importance of healthy behaviors in order to achieve the desired weight. Many persons are tempted to change their lifestyle, by adhering to different diets, exercising and managing stress (2). One might argue that this change that focuses on a healthy lifestyle is a positive result of the obesity epidemics. Through a variety of sources, the population becomes exposed to a series of information about ways to im-
prove their diet. It becomes obvious that different types of food products are associated by some persons with health (3). The inflation of legislation to regulate and manage dietary risks generates a perverted effect, increasing the imaginary dangers. The rational of the consumer is generally binary (with risk or without risk) and non-probabilistic. The psychological impact of legislation of risk is stronger than the risk itself and brings a bonus of power to self-control in order to obtain the desired hygiene or at least the illusion of food security. However, in recent years, evidence has emerged suggesting that a subset of the population takes healthy eating too far, towards food “extremism”, with negative physical, psychological and social consequences (4). These are the orthorectics.

The definition of orthorexia. The term orthorexia means rightful eating, being a combination of the Greek words “orthos” = right, correct and “orexis” = appetite.

Orthorexia is not a weight loss diet, but a pathological fixation for food perfection. Orthorectics are not just obsessed with rightful eating, but have also a specific attitude regarding food, the cooking of food and avoidance of certain foods that they consider bad for their health. The quality of the products they consume is more important than personal values, carrier related plans or social relationships. The desire to eat healthy foods is not an abnormal behavior in itself, but it is defined as orthorexia nervosa (ON) only when it makes the person give up their normal lifestyle. ON can be seen as a negative behavior when optimal nutrition is related to anxiety and concern regarding health and the quality of foods. Orthorectics install a series of constraints which affect the nature, the terms and the rhythm of nutrition (5).

Initially conceptualized by Bratman in 1997 (6), the term ON was invented to describe an “unhealthy fixation to eat healthy foods” (7). Although Bratman claims that ON is an unique type of eating disorder, in which factors like taste or pleasure are less important, and health and nutritional value are more important and which focuses on the quality of foods, rather than the quantity, other researchers indicate that this uniqueness cannot be demonstrated (8,9).

It is not fully investigated how dangerous the clinical disorders of ON are to the individual, but, based on personal experience, Bratman claims that ON is a disorder with negative physical, psychological and social effects which escalate with time, in an orthorectic society (10).

The physical consequences attributed/associated with ON. The negative physical consequences of ON result from the fact that strict diets exclude groups of important foods. ON frequently leads to avoidance of previously preferred foods, thus reducing the number of foods consumed. People with ON exclude from their diets everything that is considered “impure” or imperfect in any way. This eating style has serious consequences through caloric deficit and lack of vitamins and minerals (11). Ironically, the quest for dietary perfection can lead to anemia, osteopenia and other medical consequences (12). In the desire to add years to life, orthorectics make life meaningless. This focus becomes an obsession, self-discipline becomes self-punishment and the effort could turn into addiction.

The psychological consequences attributed/associated with ON. People with ON can dedicate a long time to planning, organizing, buying and preparing unpollut-
ed and healthy food. They can feel the need to “punish” themselves with more and more drastic food restrictions when they disobey the self-imposed rules. Some people may feel that adhering to a perfect diet help them reach a feeling of personal purity and perfection. After a while, the strict control over food leads to a feeling of relief, energy and power. Control over personal eating habits is viewed as rewarding, which only strengthen their beliefs (13).

One can detect some pseudo-spiritual connotations with eating pure foods, religious elements and specific rituals in the kitchen, regarding cooking (12). People with ON describe their symptoms as an overwhelming, obsessive physical and psychological desire to feel pure, natural and healthy, which begins to overcome other pleasant aspects of life (4). “Healthy” eating becomes an (unhealthy) addiction and “pure” eating is the only way to be healthy, even if the cost is losing other opportunities of life and just the illusion of total safety and the desire for complete control.

The social consequences attributed/associated with ON. People who suffer from ON are often socially isolated, as a consequence of their lifestyle, avoiding groups where their food choices could be questioned or contested. They may feel the need to bring to dinners their own food, which fulfill their idealized nutritional standard and for which they spent their whole time searching and preparing. These persons are characterized by discipline and a sense of moral superiority, of extreme pride over those who eat incorrectly, which only increases their social isolation from all those who do not understand the fact that food could be ritualized (4,6). People who think that only their diets are acceptable go to extreme length to convince those around them who do not adhere to this new „religion” or who do not show devotion to healthy food.

Through these three types of consequences (physical, psychological and social), Bratman suggests that ON is a distinctive psychiatric disorder. As research progressed, the possibility was raised that ON is a version of an eating disorder or an anxiety disorder (9).

ON as an eating disorder. Eating disorders are psychiatric disorders defined as abnormal eating habits which could include either insufficient or excessive food intake, detrimental to the physical and mental health of an individual. Anorexia nervosa (AN) and Bulimia nervosa (BN) are the most common specific forms of eating disorders, but included in the classification are also Binge Eating Disorder (BED) and Eating Disorder Not Otherwise Specified (EDNOS).

Bratman himself shows some resembles to AN. Like anorectics, people with ON are so focused on control over food that their life unbalances by losing contact with previous food habits and the perspective of having to change the new eating behavior. ON and AN are considered to have in common a genetic predisposition for perfection, high levels of anxiety and a need to control the environment (14). Orthorectics often prefer to starve than to eat foods they consider “impure”.

However, one should notice that, despite the shallow characteristics which could indicate some overlap, diagnosis of AN implies other supplemental important criteria, like reduced weight, compensatory behaviors and amenorrhea. As a result, some researchers (13, 15) suggested that, rather than being classified as an Eating Disorder, ON could be better considered a
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risk factor for future eating disorders.

However, Bratman has observed two main differences between ON and eating disorders. First of all, in diseases like AN or BN, the disorders in eating are expressed quantitatively, whereas in ON, they are expressed qualitatively. More recent research indicate that this is not always true, as some persons with eating disorders have individualized rules about the quality of the foods they consume (8, 11). Bratman has claimed another difference between ON and eating disorders, which focuses on motivation. More precisely, he claimed that, unlike AN, where the goal is weight loss, people with ON are lead by the desire to obtain a feeling of perfection and personal purity (6). However, recent studies suggest that these motivations, especially those to reach perfection, are also present in people with AN (14, 16).

To the original arguments of Bratman, results of recent studies show that there are differences regarding the prevalence of ON in men and women. Both AN and BN are more frequent in women (17), but authors raise the possibility that ON is more frequent in men (7, 18, 19). However, one must notice that research about BED show the same results as for ON regarding the higher frequency in men (20).

**ON as an anxiety disorder.** Other arguments claim that ON could be better conceptualised as an anxiety disorder, especially as a variance of obsessive-compulsive disorder (OCD).

An obsession is an irrational thought which appears repeatedly. A compulsion is a certain behavior that a person does repeatedly with the aim of protecting themselves against an obsession. Obsessive-compulsive neurosis is one type of anxiety disorder in which patients realize that their obsessions are irrational but worry that they can become reality and face them by completing ritualized actions (compulsions). Ritualized behavior can reduce anxiety, distress of a person, but by no means can it bring any satisfaction or pleasure. Reducing risk through control increases fear of risk.

Bratman (6) describes as characteristics of ON the obsessive adherence to a strict diet, careful selection and examination of all foods in regards to their content, origin, presence of artificial ingredients/additives, preservatives, and others, detailing and engagement in extremely careful planning of meals, confrontation with guilt if there is deviation from self-imposed food restrictions. The ways of preparing food, the tools used in the kitchen and other instruments used are part of the obsessive ritual. The overlapping point between ON and OCD are anxiety and perfectionism. From this perspective, personal food restrictions in ON are meant to reduce anxiety related to food, which is determined by the current cultural focus on establishing models for healthy living (21). Obviously, in this moment, there is need for further studies in order to determine if ON is truly a distinctive disorder or it is better characterised as an OCD. In short, the exact nature of ON is unclear. It could also be argued that ON is not a psychological disturbance, but a tendency in society. Unfortunately, too many physicians recommend dietary restrictions for all sorts of diseases (asthma, allergies, irritable bowel disease) in order to eliminate certain “irritants” from the dietary plan. This could be a potential step towards developing food fixations (22).

**The diagnosis of ON.** Steve Bratman has proposed a test which includes 12 questions to detect orthorectics. In his opinion,
which is not generated by an empirical research, the diagnosis of ON would be put when a person: spends more than 3 hours per day thinking about and preparing healthy food; feels superior to those with differing eating habits; follows a particular self imposed dietary regimen rigidly and engages in compensatory restriction to make up for any dietary indiscretions; attaches self-esteem to adherence to the self imposed diet (feeling of self-satisfaction when complying with the self imposed dietary regimen); makes consumption of healthy diet the central focus of life, at the expense of other personal values, relationships, previously enjoyed activities, and sometimes, ironically, physical health; makes nutritional value of meal more important than the pleasure of eating it.

Donini et al (23) have validated a questionnaire for the diagnosis of ON. It is known as the ORTO-15 questionnaire and has 15 multiple choice questions (with answer choices: always, often, sometimes, never) which evaluate the prevalence of ON. A score of 1 is given to the answer that indicates orthorexia, where as a score of 4 is given to the answer indicating “health”. The sum of the scores represents the final score. Donnini et al proposed a cut-off score of 40 for ORTO-15 test. A score below 40 indicates that the person has orthorexic tendency. In this way, the Italian researchers reported a prevalence of ON of 57.6%. If the cut-off value was set at 35, the prevalence dropped to 21% (24). In 2015, the questionnaire was validated also for adolescents (25).

The application of the procedure developed by Robins and Guze in 1970 (26) to the diagnosis framing of ON in comparison to other eating or anxiety disorders shows the gaps in research. The few existing studies focus entirely on the first step of determining diagnosis validation (clinical description), whereas the diagnosis construction of ON has to demonstrate other four criteria: Laboratory findings; Delimitation from other disorders; Follow-up studies; Family studies.

The majorities of studies focus on very small study samples like homogeneous groups of medical students, nutrition and dietetics students or performance artists, and lack experimental rigors. There is a lack of systematic investigation and thus the studies are not comparable. In 2013, Varga et al found in literature only 11 studies regarding ON (27). Even in this small number of studies, the applied criteria and the results regarding the prevalence of ON were extremely variable. The average prevalence of orthorexia was 6.9% for the general population and 35-57.8% for high risk groups (health professionals, artists). Risk factors include obsessive-compulsive characteristics, previous food related disorders and socio-economic status (18, 19, 21, 28-32).

Current practices suggest that, in order to have success in treating ON, one should combine psycho-education, cognitive behavior therapy and sometimes medication (5, 12, 22).

**CONCLUSIONS**

The validated diagnosis criteria for ON are somehow controversy (33,34), because ON has not been officially recognized as a distinctive disorder by the American Psychiatric Association in Diagnostic and Statistical Manual 5th edition (DSM-5), or by the World Health Organization’s International Classification of Diseases (ICD-11). There is need for the development of supplementary psychometric tests in order to be sure that future research will be im-
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proved by using reliable and validated evaluation instruments. Establishing prevalence rate, determining psycho-social risk factors and psycho-pathological co morbidities will create efficient therapeutic interventions (35).

ACKNOWLEDGMENTS
This work received financial support through the project "Program of Excellence in multidisciplinary doctoral and postdoctoral research in chronic diseases", contract no. POSDRU/159/1.5/S/133377, beneficiary "Gr. T. Popa" University of Medicine and Pharmacy Iasi, co-financed from the European Social Fund through Sectoral Operational Programme Human Resources Development 2007-2013.

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