“Healthy” When the pursuit of health turns into a mental disorder: the case of orthorexia nervosa.

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“Healthy”
When the pursuit of health turns into a mental disorder: the case of orthorexia nervosa

ACADEMISCH PROEFSCHRIFT

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CHAPTER 4. Developmental pathway of Orthorexia Nervosa: factors contributing to progression from healthy eating to preoccupation. Experiences of Dutch Health Professionals.

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Orthorexia nervosa (ON) has in recent years attracted attention, but the scarcity of empirical research on the matter generates uncertainty about its progression. This study aims to gain insight into the developmental pathway of ON and factors contributing to it, to establish its etiology. Anamnestic information of patients identified by health professionals as suffering from (symptoms of) ON was recorded and analyzed to find common factors and triggers. The study used a sequential exploratory mixed-methods design (interviews n = 10; questionnaire n = 101). Respondents were nutritionists, psychologists, psychotherapists, and support workers with experience in treating eating disorders in the Netherlands. Environmental factors influencing the development of ON were identified (e.g. pseudoscientific nutritional experts on social media), together with baseline risks (e.g. young age, female, high level of education, active lifestyle), initiating events (e.g. experiencing a break up/divorce, family problems, psychological changes during puberty, planned medical interventions), symptoms (e.g. low food intake, weight loss, feelings of depression and anxiety, spare time spent mainly thinking about healthy food), diagnosis and type of treatment proposed (e.g. cognitive-behavioral therapy, exposure therapy, admission to an eating disorder facility). This study explores the development of ON as a continuous interaction of biological, psychological, and social dynamics over time.

Keywords: orthorexia nervosa, disordered eating behavior, developmental pathway, mixed methods

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4.1 Introduction

Healthy eating is a social trend that has been growing in recent years. According to Google Trends, the number of searches for the terms 'how to eat healthy' has nearly tripled in the last sixteen years [1]. Although this phenomenon in itself can have positive implications for tackling such problems as obesity [2], it can also lead to problems when these ideas are taken too far. One of the possible consequences of the rise in popularity of healthy eating among various populations is the risk of developing a problematic preoccupation with the perceived quality of food [3].

In recent years, increasing amount of attention has been given to this preoccupation, most notably by Bratman (1997) who coined the term orthorexia nervosa (ON). The main characteristics of this phenomenon are: spending an excessive amount of time thinking about, looking for and preparing food; feeling superior to those with different eating habits; rigidly following a particular health food diet; engaging in compensatory restrictions to make up for dietary indiscretions; associating self-esteem with adherence to the diet; and turning eating 'properly' into the central focus of life [4]–[6]. An important distinction that separates ON from established eating disorders, such as anorexia nervosa (AN) and bulimia nervosa (BN) is the fact that preoccupation is not linked to the food quantity or weight loss, but rather to the perceived quality of foods consumed [7].

Currently, ON is in a grey area, as there is no consensus about its diagnostic attribution, clear definition, or diagnostic criteria. However, regardless of the official status of ON, it appears to be a relatively widespread phenomenon in Western countries [8]–[12], which has also been recognized by health professionals [13], [14].

The research on ON up to now has been quite fragmented and has concentrated mainly on the diagnostic criteria, tools, and general prevalence of the eating pattern [15]–[18]. The limited research into the possible factors contributing to ON has shown that this phenomenon seems to have biological, psychological, and social roots. Among the factors researched were: personal desire to improve one's health [19], influence of modern Western culture [13], and influence of social media [20]. In addition, it has been discussed that ON-related behavior develops over time. More specifically, there seem to be two broad stages that lead to the development of ON-related behavior: the first being a relatively harmless choice to pursue a healthy diet, and the second being an unhealthy obsession evolving from this aim [21]. Only the second stage is indicative of pathology, although when irrational or strange dietary ideas are present in the first stage, this is sometimes erroneously labelled as disordered eating [21]. The scarcity of broad-scale empirical research leads to uncertainty about the progression of ON.

Setting the discussion about the diagnostic criteria and classification of ON aside, it is important to investigate the development of ON in order to explore its etiology. The aim of this study was therefore to gain insight into the developmental pathway of ON-related behavior and factors contributing to it, by recording and analyzing

anamnestic information of the patients identified by health professionals as potentially fitting the ON criteria. The research question of this study is: *How does ON typically develop, and what factors contribute to the development, according to health professionals?*

4.2 Methods

The present study was conducted using a sequential exploratory mixed-methods design. The data collection consisted of semi-structured interviews and an online questionnaire. Data collection and analysis were facilitated by a conceptual framework resulting from the combination of the adapted growing into deficit model by Syurina et al. (2015) [22], the dynamic biopsychosocial model of health by Lehman et al. (2017) [23], and the network theory of mental disorders by Borsboom (2017) [24]. The adapted Snyderman's curve was used because it allows for considering the progression of ON along time; the biopsychosocial model of health was used because we hypothesized that ON, as other eating disorders [25], could be influenced by bio-psycho-social factors; the network theory was used as it accounts for the complex interactions among symptoms.

4.2.1 Conceptual Framework

The conceptual framework (Figure 4.1) visualizes how a psychological illness develops in a person, starting from the presence of inactive symptoms (predisposition) that over time develop into active symptoms, triggered by initiating events and effects of the environment, until enough symptoms are present to constitute a disease.

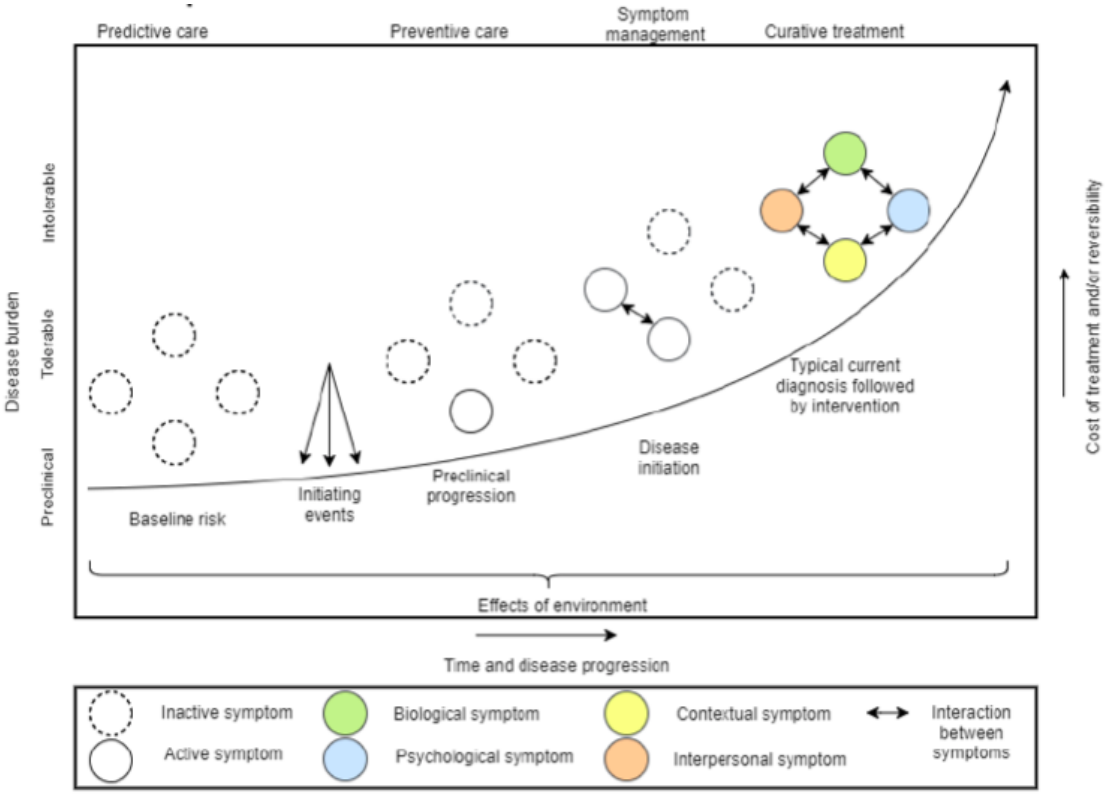

Figure 4.1 Conceptual framework, adapted from Syurina et al. (2015), Lehman et al. (2017), Borsboom (2017).

4.2.2 Interviews

Interviews were held with health professionals practicing in the Netherlands who had experience with treating a patient with ON symptoms. To assess whether they had experience with treating such a patient, they were given an explanation of what ON entailed and asked whether they recognized any of their former patients in this. They were invited to participate via email, phone and/or social media. The interviews were semi-structured and guided by a visual supplement and a written interview guide. The interviews focused on four sub-topics: general description of the (former) patient(s) with ON symptomatology, discussion of the patient's anamnestic history, description of the patient at the time of diagnosis, and a review of the selected course of treatment and its results. During the discussion of each stage, attention was given to biological, psychological, interpersonal, and contextual factors that played a role in patients' life and could potentially contribute to development of ON eating patterns. The visual interview guide supplement consisted of three stick figures that represented the development of ON symptoms over time, reflecting the conceptual model in a simplified manner. The interviews were conducted and coded in Dutch. Quotes have been translated to English for publication purposes.

4.2.2.1 Data Analysis

Interviews were manually transcribed and coded using Atlas.ti 8. Thematic analysis [26] and axial coding were employed to help identify themes in the timeline of ON.

4.2.3 Survey

The survey participants were health professionals practicing in the Netherlands, with experience in treating eating disorders. With regard to the absence of ON as an official diagnosis, it was difficult to recruit professionals who encountered patients suffering from ON. Therefore, we also included professionals who had experience with treating people with disordered eating habits in general, as we considered their opinion to still be of value to understand ON's developmental pathway. Because of the anonymous nature of the questionnaire, it was impossible to assess whether all interviewees also completed the questionnaire. The survey was conducted in Dutch. The variables have been translated into English in the results section for publication purposes.

4.2.3.1 Questionnaire Design

The online survey was created using the Qualtrics programme. The survey was developed using main themes raised by the first five interviews, and thus included a section on a person's characteristics before developing ON, factors and triggers contributing to development of ON, symptoms of ON, and treatment methods. The respondents could indicate on a five- or three-point Likert scale whether they agreed with the influence of these aspects on the development of ON. In addition, demographics of the participants were collected. As some health professionals might not have treated someone with ON symptoms, information was given about diagnostic criteria [16] to help them form their opinion.

4.2.3.2 Data Analysis

The survey data was analyzed using StataIC 15. Demographics of the participants were reviewed using descriptive statistics. Findings of the questionnaire were compared with and used to complement those of the interviews.

4.2.4 Ethical considerations

Owing to the characteristics of the study population and the type of data collected, the study was exempted from a compulsory medical ethical approval procedure in accordance with Dutch law: Wet Medisch-Wetenschappelijk Onderzoek met Mensen. To ensure a high ethical standard of the study, the researchers followed the prescriptions of the Dutch Scientific Code of conduct through all stages of data collection and analysis. Written informed consent was obtained from all participants.

4.3 Results

Qualitative and quantitative results were interpreted and analyzed according to the conceptual framework (Figure 1). To guide the reader, the sub-headings of the results section correspond to (some of) the phases reported along the curve: (1) effect of the environment, (2) baseline risks, (3) initiating events, (4) symptoms, and (5) typical current diagnosis followed by intervention. In every section, qualitative and quantitative results are presented together. This demonstrates how they complement and strengthen each other.

4.3.1 Demographics

4.3.1.1 Qualitative Sample

Ten health professionals (27–60 y/o) were interviewed: eight women and two men. Among them were nutritionists, a nutritionist/therapist, a psychologist, a nutritional psychologist, a pediatrician, a professor specialized in eating disorders and a support worker with personal experience of working at an eating-disorder treatment facility. Most health professionals could think of a few patients that had shown symptoms of ON, whereas some, mostly nutritionists, could think of many.

43.1.2 Quantitative Sample

One hundred and one participants took part in the survey during the two months it was online. The majority of the sample were women (96.5%) and the most highly represented profession was nutritionist (55%), followed by psychologist (17%), support worker with personal experience (5%), psychotherapist (2%), and 'other' (21%). Professions that were indicated through the 'other' option included nurse, personal trainer, combination of nutritionist and psychotherapist, clinical psychologist, psychosocial counsellor, and a nutritional psychologist. With regard to their clinical activity, 25% of respondents had been clinically active for less than five years, 25% between five and 10 years, 28% between 10 and 20 years, and 20% for more than 20 years. Finally, 64% of the sample declared having had a previous experience with treating (symptoms of) ON.

4.3.2 Developmental Pathway of Orthorexia Nervosa

4.3.2.1 Effect of the Environment

A prominent environmental factor influencing ON was the presence of healthy or unhealthy eating habits in the direct environment (mentioned in five interviews):

"I think the origin lies with her family, as they were all extraordinarily focused on being healthy." – Nutritionist/therapist

Interviewer: You mentioned that her mother suffers from obesity, do you think that had an influence on the daughter? *"Yes, unconsciously. Because the girl had a healthy BMI before, but I think* [her mother's obesity] *did play a role* [in her developing an eating disorder]*."* – Nutritionist/psychologist

Social and mainstream media, and pseudoscientific nutritional 'experts' were mentioned as other environmental factors affecting ON:

"Because the media tells you that sugar is bad, the media tells you that carbs are bad – that diet is booming, which is just scary. Movie stars will even tell you that gluten is bad for you … [Online nutritional 'experts'] *say it as though they have the qualifications to say it, my work only consists of explaining people about food, because people have lost the plot when it comes to food."* – Nutritionist

Environmental factors influencing ON mentioned during the interviews were confirmed by the survey results. The inconclusiveness of the interview results regarding both healthy and unhealthy eating habits in the direct environment is not explained by the results of the survey, as only the influence of healthy eating habits was examined.

4.3.2.2 Baseline Risks

To explore baseline risks for individuals to possibly develop ON, interviewees were asked to identify what characterized the patients they encountered. In all cases, the patient was a young (16–35 y/o) woman who was educated to an intermediate or high level. Having an active lifestyle and an ambitious personality type were both prominent characteristics (both mentioned in six interviews). Some health professionals elaborated upon the ambitious personality type, mentioning perfectionism and giving high importance to school or work (mentioned in three and two interviews, respectively). In the case of body weight, health professionals contradicted each other. Four mentioned that their patient had always had a healthy weight, whereas three mentioned that their patients were overweight. Contrasting opinions about self-confidence were observed too: three women were said to have a high degree of self-confidence, whereas four were said to have a low level of self-confidence:

"*She also felt like she couldn't do a lot of things right, and that she was never good enough. But if she was fit, really strong, then she would feel good.*" – Support worker with personal experience

Respondents also disagreed about the patient's social life. Three interviewees encountered a patient with an active social life, whereas the other three mentioned their patients did not have many friends:

"She limited herself with respect to her social life, because she just didn't think she was fun, she really thought she was too fat as well." – Nutritionist/psychologist

The results obtained from the questionnaire confirmed the findings of the interviews. Furthermore, they clarified some of the inconclusive results obtained from the qualitative phase: with regard to self-confidence, survey respondents favored the low self-confidence option (74%), and with regard to body weight, low or normal weight was most often selected as a characteristic of patients (92%). Similar to the interviews, results of the survey are inconclusive when it comes to good contact with friends and colleagues/fellow students.

4.3.2.3 Initiating Events

Initiating events were relatively difficult to identify for interviewees. Having recently experienced a break-up or divorce, experiencing family problems and not having a good relationship with one's family were mentioned as triggers for the development of ON. Other triggering events included comorbidity with other mental illnesses, namely depression and autism (mentioned in one and two interviews, respectively):

"She has also been diagnosed with an autistic disorder … and because of that she has always been a picky eater." – Nutritional psychologist

Other possible initiating events included the physical and psychological changes that accompany puberty, looking up increasing information about food and taking up an interest in a flexitarian, vegetarian or vegan diet. Finally, two specific triggers related to bodily issues were identified. First, one health professional described a patient who had suffered from extreme stomach aches for which a nutritionist recommended her to eat more healthily. The patient took the advice to eat more healthily, but this triggered the development of symptoms of ON. Second, a patient had an abdominoplasty surgery scheduled, which triggered her to eat more healthily to ensure the operation would be as effective as possible:

"From the moment that the surgery was planned, she thought 'now I am going to change my diet, because then the surgery will have the most rewarding effect' and that is when the downward spiral started." – Support worker with personal experience

The triggers mentioned during the interviews were confirmed by the survey results. Despite identifying possible initiating events, it is important to note that most health professionals expressed the view that they could not be certain of what had triggered or been a contributing factor to the development of ON symptoms.

4.3.2.4 Symptoms

As ON is not an official diagnosis, most health professionals described a patient who showed symptoms of ON. The symptoms mentioned during the interviews overlapped considerably, and can be divided into biological, psychological and social symptoms.

4.3.2.4.1 Biological Symptoms

Low food intake was a characteristic that all the interviewees observed in their patients. The patients differed slightly in what food they considered healthy: the patients' diets were most commonly low in fat and low in sugar (both mentioned in four interviews), low in carbohydrates and vegetarian or vegan (both mentioned in three interviews) and in one case, the patient's diet was low in gluten. Another prominent symptom was (severe) weight loss (mentioned in nine interviews), which half the women realized, but did not consider a problem. As a result of this weight loss, some patients experienced dizziness (mentioned in two interviews), became more preoccupied with food (mentioned in five interviews) and half of them stopped menstruating. As a consequence of the low food intake, many women experienced nutritional deficiencies and felt tired (mentioned in six and five interviews, respectively). The seven women who had previously an active lifestyle before developing symptoms continued with working out, although for most it became more of an obsession:

> *"She went running six times a week, because if she was really stressed, then running was her way of coping. And on top of that she also went to the gym."* – Support worker with personal experience

4.3.2.4.2 Psychological Symptoms

Psychologically, the patients differed in how well they felt. In four cases, the patients still felt relatively well:

> *"Mentally they can be doing really well, because* [healthy eating] *is a kind of power for them."* – Nutritionist

However, more than half of the women did not feel well mentally, experiencing feelings of depression and anxiety, predominantly regarding food (mentioned in five and seven interviews respectively):

> *"At one point I suggested having low-fat quark instead of non-fat quark for lunch. In that moment she just froze, I could just see it in her body posture and her eyes. It was just pure panic."* – Nutritionist/therapist

One health professional mentioned that anxiety may also be connected to catastrophic thinking:

> *"I'm thinking of catastrophic expectations, for example, if they don't adhere to this eating pattern then they are convinced they will get cancer or something like that."* – Professor specialized in eating disorders

4.3.2.4.3 Social Symptoms

Most health professionals recognized that the patients' behavior had an impact on their social life. As spare time was mostly spent on exercising, preparing or shopping for food (mentioned in seven and three interviews, respectively), half of the women spent less time socializing with friends. According to some health professionals, the patients would be less likely to attend social events, because these often include eating:

"*She stopped having dinner with other people, because if she did, she couldn't control what she would have for dinner*." – Nutritionist/psychologist

If healthy eating was a theme in their social environment, however, social activities did not necessarily decline.

Triangulation of the interview results with the survey results demonstrates overlap. The inconclusiveness regarding the mental state of patient was not further investigated, as feeling mentally well was not an option in the survey. However, the inconclusiveness regarding whether social activities were diminished or not was resolved, since according to survey respondents contact with others did not decline (70%).

4.3.2.5 Typical Current Diagnosis Followed by Intervention

With regard to diagnosis, most health professionals were hesitant to diagnose their patient or refrained from diagnosing altogether. Only four health professionals gave diagnoses, (restrictive) AN (in 2 cases), an eating disorder without further specification or OCD:

"I personally think it was more of an obsessive-compulsive disorder, in that she really tried to be in control through maintaining those restrictions, control over food and with that hopefully also control over the rest of her life." – Nutritionist

The health professionals provided extensive information on the treatment. Therefore, within this section, the following subsections address: (1) reasons to seek treatment, (2) factors influencing treatment, (3) types and effectiveness of treatments administered.

4.3.2.5.1 Reasons to Seek Treatment

Most commonly, the patients would seek help because of people in their direct environment being worried (mentioned in nine interviews):

"She did realize that [she had a problem] *and she did say that it was not so much a problem for her, but if we thought it important that she then would not mind gaining a little more weight."* – Pediatrician

Other incentives to seek help (each mentioned in one interview), were bodily discomfort, wanting to recover for the sake of family/children, wanting to solve issues caused by disordered eating in a relationship with a partner, being worried about gaining weight after having lost it and lastly mental discomfort.

4.3.2.5.2 Factors Influencing Treatment

Parents were mentioned during three interviews as having a large influence on the effectiveness of the treatment. If parents were supportive and coaching their child during the course of the treatment, this was said to have a positive effect on the child (mentioned in two interviews). Conversely, if parents doubted their children, or showed little support, this had a negative effect on the outcome of the treatment:

> "[Her mother] *made the awkward move of saying that she did not believe* [the treatment] *would succeed in that way. This basically gave her daughter a free pass to fail and not get better."* – Pediatrician

Furthermore, avoiding the use of some terms such as 'eating disorder' and 'gaining weight' positively influenced treatment for some patients.

4.3.2.5.3 Types and Effectiveness of Treatments Administered

Relatively common types of treatment mentioned by health professionals included cognitive-behavioral therapy (CBT), exposure therapy and group therapy (mentioned in three, two and two interviews, respectively). Forms of treatment that were administered in only one case included seeing a GP to test blood levels, family therapy, home guidance, pediatric help, social therapy, psychiatric treatment and admission to an eating disorder clinic.

The most prominent aspect of treatment was restoring the weight of a patient (mentioned in eight interviews). Apart from health benefits, a reduction in the preoccupation with food was a motive for many health professionals to emphasize weight restoration (mentioned in three interviews). In three cases this was accomplished by educating patients on the psychological importance of proper nutrition:

> *"Look, when you eat very little and you start eating a little more, even if it's just more nutrient-rich, then mentally you will relatively quickly feel a lot better."* – Nutritionist/therapist

Furthermore, building motivation was a relatively common aspect of treatment (mentioned in five interviews):

> *"The moment that* [people with symptoms of orthorexia] *have to start changing things and tackling things, they need to know why they're really doing it. Because only when you have a very clear motivation for yourself, then it's worth it to keep going."* – Nutritionist/psychologist

As not all treatments had been concluded or as some patients had been referred to a different health professional, the effectiveness of treatment was often uncertain. Two patients were still in treatment, one of whom showed signs of improvement due to having been admitted to an eating disorder clinic. Three patients were referred, of which two had been in treatment with a nutritionist to increase their food intake. The other patient had had a combination of CBT, group therapy, nutritional advice and motivation building. What can be said with certainty is that weight restoration was effective in three cases. CBT, exposure therapy, and family therapy were all effective in separate cases. Group therapy (combined with admission to an eating disorder clinic), was effective in at least one case.

Attitudes towards the different treatment types was hard to establish since opinions differed greatly among patients and several types of treatment were mentioned, meaning the number of women treated in a similar way was small. However, it was mentioned that treatment is often difficult, due to the pervasive nature of ON:

"Her sense of identity was related to eating healthily, because that is something that she is good at, and thus she found it difficult to let that go [during admission]." – Psychologist

Similar to what was observed among the interviewees, many different options for treatment were given in the survey. Education on the psychological importance of food was deemed most appropriate by many survey respondents, followed by group therapy and altering food intake (see Figure 4.2).

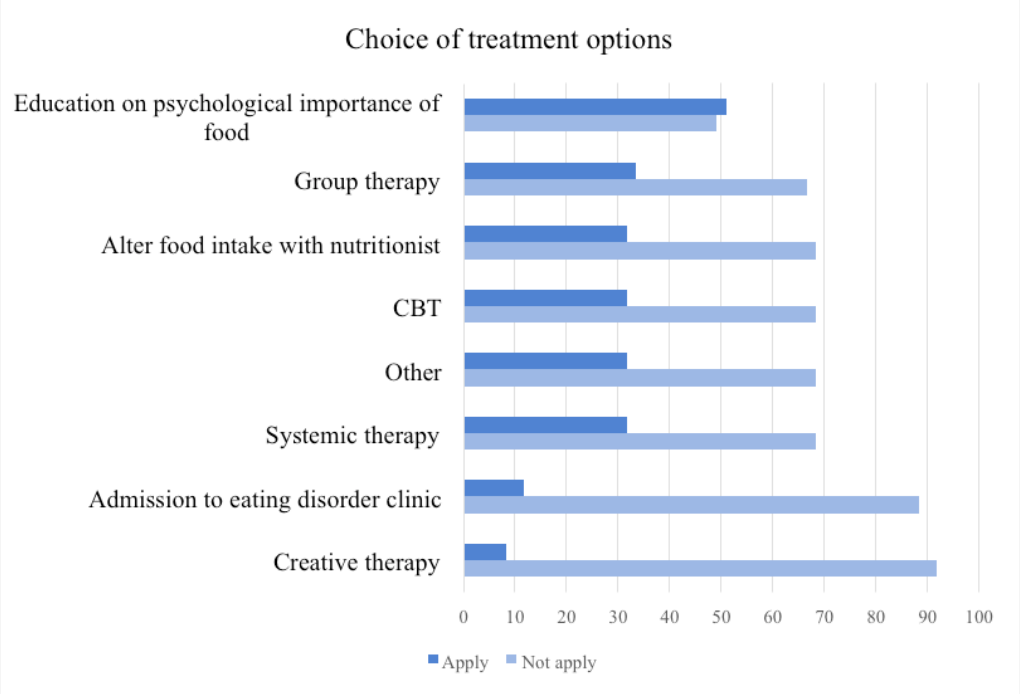

Figure 4.2 Overview of treatment options for ON identified by questionnaire respondents.

4.4. Discussion

This mixed-methods study was aimed at getting insights into the developmental pathway of ON and contributing factors, by recording and analyzing anamnestic information about patients identified by health professionals as potentially suffering from ON. The results were collected through interviews and validated by a questionnaire.

Environmental factors influencing ON were identified (e.g. pseudoscientific nutritional experts on social media), together with baseline risks (e.g. young age, female, high level of education, active lifestyle), initiating events (e.g. experiencing a break-up/divorce, family problems, psychological changes during puberty, planned medical interventions), symptoms (e.g. low food intake, weight loss, feelings of depression and anxiety, spare time spent mainly thinking about healthy food), diagnosis and type of treatment proposed (e.g. cognitive-behavioral therapy, exposure therapy, admission to an eating disorder facility).

Although previous studies have used the experience of health professionals to study the clinical recognition of ON [12], [14], [27] and the cultural phenomena believed to be associated with ON [13], the current study is unique in its use of health professionals' experience to assess how ON develops and who typically develops it. Furthermore. it contributes to the sparse literature on potential ways to treat ON.

Bratman identified two stages of ON, the first being a relatively innocent stage where one chooses to eat a healthy diet – corresponding to the 'preclinical progression' in the model we propose; the second stage involving an unhealthy pursuit of the previously adopted ideals of healthy eating – corresponding to the 'disease initiation' stage of the model we propose here [21]. However, the proposed model adds more depth to what comes before and after these stages. We believe this developmental conceptualization of ON may inform future development of phase-dependent diagnostic tools for ON. Furthermore, this model makes it possible to locate this study in scholarly discussions about the development of a mental disorder and provide structure to something that is very complex in nature, that is the interaction of factors responsible for the onset and progression of a psychopathology.

The findings of the present study are mainly in agreement with and complement those of the literature review undertaken by McComb and Mills (2019) [28]. This review reports inconclusive findings regarding the association between age, sex, educational level and ON [28]. In this regard, professionals in our study agreed in considering young age, female and high level of education as baseline risks for ON. Among the risk factors for ON found by McComb and Mills, perfectionism and use of social media were confirmed by the present study.

In the present study, health professionals reported weight loss as a symptom rather than a motivation to engage in ON-like behavior. This finding underscores the inconclusive evidence regarding ON and weight loss that

characterizes the current literature about ON [19], [28], [29], and underlines the great need for future research on this aspect. Two other inconsistencies were found in this study. First, health professionals described patients who typically develop ON as both having an active social life and not having an active social life. The second is that patients were said to both come from an environment where health was a priority and from an environment where health was not a priority. As both can logically instill a desire to develop a healthy lifestyle, this inconsistency is logical but provides an interesting direction for further research.

As a further recommendation for future research we suggest that additional factors that have been correlated with ON through literature reviews (see for example: McComb and Mills, 2019 [28]) are also explored with health professionals. The current research took a bottom-up approach where topics put forward by health professionals were further examined. As the literature on ON thickens, this allows for more top-down investigation.

In conclusion, we identify some strengths and limitations. The most important strengths are: (i) the use of mixed methods, which allowed us to both benefit from validity and generalizability of quantitative techniques, and from the depth of qualitative techniques, thus overcoming the limits that would have occurred if only one of the two techniques had been used; (ii) the involvement of professionals' experiential knowledge and expertise in exploring the developmental pathway of ON, knowledge that is considered important [30] and that has not been used in past research on the subject; (iii) the use of a theoretical framework in guiding data collection and analysis, which assisted in contextualizing formal theories in the study, ultimately helping situating it within broader scholarly discussions [31]. The main limitations are: (i) the fact that the questionnaire was disseminated after having conducted five out of ten interviews, which prevented the questionnaire from addressing all the controversial issues that emerged during the interviews; (ii) the relatively limited size of both qualitative and quantitative samples; (iii) our focus on one specific cultural niche, which on the one hand hinders generalizability, but on the other can be used as a starting point for other similar studies elsewhere, and (iv) the fact that not all health professionals involved in this study had encountered a patient with ON. With regard to the latter, we acknowledge that, in the absence of an official diagnosis, it is difficult to recruit professionals who declare having encountered ON patients. We were interested in the opinions of professionals who had dealt with people with disordered eating habits in their daily practice, because we believed their opinions could still be useful to gain insights into the developmental pathway of ON.

4.4.1 Clinical Relevance

This section contains some reflections on how the results of this study can be useful for clinical practice. This is intended to stimulate reflections on how scientific results can be translated into practice and how this can facilitate prevention and treatment of ON. The result of this study that is perhaps most useful for clinical purposes is its contribution to the early recognition of ON symptomatology. Early recognition of the symptoms makes it possible to act more promptly with treatment, thus increasing the chances that the patient will recover.

A critical reflection, which could inform the development of therapeutic interventions, concerns the role of identity. It is now well established that identity plays a fundamental role in maintenance of and recovery from eating disorders [32]. It is possible that identity plays also a role in ON, and that identity evolves along the developmental pathway of ON, together with its progression. To support this hypothesis is the egosyntonic nature of ON symptoms [33]. Considering identity in the treatment of ON (e.g. Identity Intervention Program [34]) could therefore be beneficial.

Also beneficial for clinical and therapeutic practice is understanding whether the two phases of ON, i.e. 'healthy orthorexia' and 'orthorexia nervosa', might be two stages characterizing the progression of one single phenomenon [21], or two distinct phenomena [35]. If the former conceptualization is true, then recovery should focus on reversing ON to its initial stage; if the latter is true, then recovery should focus on turning 'orthorexia nervosa' into 'healthy orthorexia'. Since our results seem to be mainly in line with Bratman's conceptualization of the development of ON, we would encourage therapeutic practice to establish a backward path that guides the patient to find the initial healthy approach to healthy eating.

4.4.2 Conclusion

To conclude, our results show that ON has a developmental pathway and so does not appear suddenly. Its development can be interpreted as a continuous interaction of biological, psychological, and social dynamics over time. This way of displaying the development of ON helped health professionals identify symptoms, triggers, and possible treatments, information that can contribute to further research on ON and inform clinical practice.

Declaration of Interest

None.

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