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Fineo & Tantalo
A complex systems-oriented cognitive approach in the treatment of patients with eating disorders: Part one – Theory

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Summary

Eating disorders comprise one of the most complex and problematic psychiatric disorders that exist. There is, however, a significant lack of empirically validated literature outlining definitive models that explain the aetiology, pathogenesis, psychopathology and treatment of this devastating disease cluster.

The purpose of this paper is to describe a complex systems-oriented cognitive approach addressing the psychopathology and treatment of eating disorders.

The authors studied patients with eating disorders over the course of many years at the University of Captain Medical School (Italy), Department of Psychiatry and report the results of this research in two separate articles.

The first article (Part One) describes general aspects of eating disorders including epidemiology, aetiology, pathogenesis and psychopathology as observed in this population. Part Two will present a unique model of evaluation, treatment and therapeutic approaches for patients suffering from eating disorders.

The prevalence of pathological eating disorders is rapidly increasing in all developing countries. The increases may be explained in part to the impact cultural, social, economic and historical variables have on populations vulnerable to the disease. These and other variables such as parenting style were analysed and the results are discussed.

A complex systems-oriented cognitive model concerning the psychopathology of eating disorders was developed and will be discussed in detail. The model identifies, defines and explains the biological, behavioural, cognitive, emotional and relational components explaining the psychopathogenesis and structural framework resulting in eating disorders.

Key words: eating disorders, bulimia, anorexia nervosa

Introduction

Eating disorders are a group of particularly problematic afflictions due to the ongoing shortcoming of the therapeutic approaches as well as the risk of mortality. This is especially true for anorexia, which has been known to result in eventual death

[1]. In addition, it is important to stress the notion that much of the epidemiological research indicates an increasingly high incidence of eating disorders in the majority of the industrialised world [2, 3, 4].

The DSM-IV [1] includes the following diagnostic subcategories for the eating disorders: bulimia nervosa, binge eating disorder and anorexia.

Eating disorders mainly affect females, although not exclusively [5, 6]. Recently, bulimia and anorexia have also been observed in males as well. The author has had the opportunity to follow a number of male patients diagnosed with eating disorders. For the sake of conciseness, patients will be referred to by the masculine gender in the subsequent text.

Bulimia Nervosa

Bulimia nervosa is mainly characterised by the concurrent presence of binges and consequent provisions aimed at limiting the risks of weight increase, such as self-induced vomiting, the use of laxatives, diuretics or excessive physical exercise. The sense of self with these patients is deeply influenced by a strongly negative opinion about fitness and body weight, which often serves to propel the illness.

Two sub-types are described in detail below. The first is characterised by the presence of self-induced emesis, while the second includes the prevalence of exaggerated physical activity.

Binge eating disorder

This is still a preliminary diagnostic category described in DSM-IV. It appears similar to bulimia, but the difference is that no behaviours exist to limit the consequences of the recorded binges. Most of the patients affected with binge eating disorder are moderately over-weight. The therapeutic approach is very similar to that which is used in treating bulimia nervosa.

Anorexia

Anorexia is characterised by the refusal to maintain a normal weight appropriate to the individual's physical structure. It is associated with an obsessive fear of gaining weight and becoming "fat." There are two variants of this disorder. The first is predominantly characterised by the restriction of food intake, while the second is characterised by the additional presence of binge episodes with successive self-induced vomiting or the use of laxatives and diuretics.

A series of epidemiological studies has shown that the incidence rate of anorexia nervosa has been steadily increasing in the Western world as recently as the 1950's. Bulimia seems to have been on a constant upswing since the 1980's [7]. Therefore some authors have concluded that eating disorders can be considered a "Culture-bound Syndrome" and especially related to the industrialised countries' contemporary culture [8, 9].

The crucial factors that play an important role in increasing the incidence of these pathologies may include the following:

- The ongoing availability of food
- A strong pressure to consume hyper-caloric foods in excessive amounts and with growing frequency: this strong psychological push results from the increased advertising and marketing campaigns for foods in general, as well as sweets, snacks and soft drinks in particular.
- Utilising eating behaviours as a means of modulating emotions.
- Excessive societal emphasis on the need for the "perfect body" and a positive self-image.

An important role in the dynamics of these disorders seems to be affected by a powerful and persuasive medium, such as television, to which children and adolescents have been greatly influenced in past decades. It is clear that the influence of cultural factors inherent in the western consumer-oriented society has been instrumental in maintaining and increasing eating disorders. This is supported by the extremely low incidence rates in the Eastern European countries during the communist era. This is also true with subsequent significant increase, which parallels the progressive assumption of life styles typical of Western Europe and the United States, after the fall of communism [10].

Cognitive-behavioural theories (CBT) initially proposed a model of pathogenesis and psychopathology of eating disorders in the early 1980's. CBT posits the assumption that a series of cognitive distortions are at the basis of most eating disorders. Such cognitive distortions are mainly concerned with the weight and shape of an individual's body. Thus Fairburn contends that anorexia nervosa and bulimia nervosa are substantially cognitive disorders [11, 12].

The crucial aspect of eating disorders, according to the cognitive perspective suggested by Fairburn [13] involves a sense of self-esteem, which normally emanates from a series of variables and competencies in different areas. In the case of eating disorders, it is progressive and exclusively related to the structure and weight of one's physical stature. Therefore, according to the cognitive perspective, individuals who are afflicted with eating disorders demonstrate strong cognitive schemas organised around body weight and shape. Furthermore, these idiosyncratic schemas are related to dysfunctional beliefs relevant to self-esteem, which is always a struggle for these patients.

According to the behavioural perspective, a crucial aspect of these disorders is to impose on eating behaviours a series of strict and stereotypical rules rather than following physiological regulation. This is founded on the natural sense of appetite and cessation. With eating disorder patients, a progressive incapability of perceiving the interoceptive signs of hunger and cessation and therefore following the natural regulation of the eating behaviour is determined. Substantially, a new type of coping for eating behaviour connected with the conscious cognitive processes, progressively substitutes for the natural regulation, which belongs to the biological and motivational sphere. This factor may be related to the perfectionism and the rigidity of one's personality structure. Such individuals tend to progressively limit their emotional experience and

to reduce the dimension of conscious control of their eating patterns as well as sexual behaviour, which is progressively restricted to the point of avoidance.

According to Fairburn, [13] a typical cognitive aspect of patients affected with eating disorders involves dichotomous thinking. According to this cognitive distortion, one views themselves as either thin or obese. There is typically no intermediate.

Fairburn described a series of cognitive and behavioural patterns, which bolster and maintain a vicious cycle that, accordingly, is at the base of most eating disorders. An integral part of these schemas involves the patient's excessive worry about the configuration and the weight of their body. The inclination toward food restriction and the performance of behaviours, such as self-induced vomiting, use of laxatives or the excessive physical exercise, is a typical characteristic.

According to Fairburn, the binge should not be conceptualised as a direct consequence of the basic cognitive dysfunction, which is predicated on excessive worry about body weight and shape. Rather, the hypotheses that the binge is a consequence of the continuous eating restrictions, is more the focus of the theory. When these patients can no longer control their very strict food intake, they lose their control completely, engaging in the opposite excess of bingeing and thus adjusting themselves to their attitude towards dichotomous thinking.

Usually, the binge is made easier by the presence of a negative mood, usually sadness or anxiety. The binge provokes a biphasic effect. It gives an immediate sense of relaxation, but, later, it increases guilty feelings and the over concern about gaining weight. This results in the immediate restoration of food restriction. In this manner, a vicious cycle is established, implemented and maintained. Food restrictions provoke binges, which, in turn, encourage food restrictions.

A second vicious cycle described by Fairburn is the one that is activated when the patient progressively discovers the mode of self-induced vomiting and the use of laxatives.

These new modalities, acquired and increasingly practised, tend to neutralise, at least in the patient's mind, the negative effects of binges on body weight. Thus, there is a tendency for binge behaviour to increase. On the other hand, self-induced vomiting and the use of either laxatives or diuretics, from a cognitive standpoint, further jeopardises self-esteem, thus encouraging the basic cognitive distortion concerned with the negative judgement of the self.

Fairburn's conceptualisation is efficient when he describes the dynamics of some aspects of the eating disorders symptoms, especially when therapeutic interventions of a cognitive and behavioural nature must be planned. However, to some, the model developed by Fairburn appears sketchy, at both the descriptive and explication levels. In fact, from a descriptive point of view, Fairburn does not take into consideration the relational dimension, particularly that of the family, which is substantially excluded from the treatment plan. In our opinion this is a mistake when implementing a therapeutic management and conceptualisation of the disorder.

Regarding the theoretical dimension, Fairburn does not appear overly concerned about this issue, perhaps for pragmatic reasons, which is oriented to a therapeutic approach founded on the "here and now." It is our impression, however, that the theo-

retical dimension is fundamental to a complete understanding of the disorder. This is why, in the past few years, we have been working to develop a model relevant to the aetiology of these disorders.

The aetiopathogenetic model that we have adopted is embedded within a complex approach, according to which, the determinism in psychiatric and eating disorders as well, should revert to several factors [14]. In particular, these factors include:

- Biological vulnerability
- Parenting
- Cultural and social factors
- Development history and adolescent crisis
- Traumatic events
- Pre-morbid personological aspects
- Decompensating key events
- Development of the disorder and affecting factors

Below, we will provide a concise explanation of this model along with the supporting literature and experimental data. Although the complex models for etiopathogenesis, bulimia and anorexia have several aspects in common, all are different, which is something that must be emphasised for their implications regarding therapy.

A complex model of etiopathogenesis for eating disorders

Biological vulnerability

With regard to eating disorders, the presence of a biological vulnerability bound to the genome has yet to be displayed. However, a series of elements demonstrate a link between these disorders and their biological entities, constituting a genotypic component of the individual. With both anorexia and bulimia, familial linkage ranging from 50% to 80%, of the presence of psychiatric disorders in one's family members, has been demonstrated [15, 16, 17].

In our work with eating disordered patients, we have frequently noticed connections among family members, not only in cases of eating disorders, but also in mood disorders as well as disorders involving drug abuse, obesity, or cases of sexual dysfunction [18]. The most significant consistency with regard to anorexia in monozygotic twins (56%), when compared to that of dizygotic twins (5%) suggests a remarkable genetic predisposition to anorexia [19].

Parenting

This aspect was fully described by cognitive therapists, Guidano and Liotti [20] and was later investigated more thoroughly by Guidano [21]. These two theorists, following a series of studies conducted by researchers in the systemic area and uncovered a crucial aspect of the etiological dynamics in dysfunctional parenting experienced by patients who later develop eating disorders. Guidano and Liotti described the systematic discovery of serious emotional difficulties in both anorexia and bulimia, which

had characterised the relationship between the patients and the caretakers during their childhood and adolescence. In both cases, these difficulties could be ascribed to over-controlling behaviour by parents of their children's emotional dynamics, although carried out with different modalities. In the case of anorexia, such control would be exerted in an open and clear manner by imposing strict rules, prescriptions and prohibitions, whereas with bulimia, it would take place under more indirect terms and within an oppressive and entangled relationship.

Guidano [22] later specified the parenting and developmental history of dysfunctional features that would serve as the basis for eating disorders, dwelling in particular upon the following aspects:

The family environment of these patients exists in a context where the acknowledgement and genuine expression of emotions is absolutely forbidden. The relational boundaries are vague and entanglement prevails. Self-esteem, still problematic, needs continuous external corroborations that are never bestowed by parents in clear and univocal terms. Eventually, perfectionism and control schemas develop.

Social and cultural factors

Particularly present and pervasive are the contemporary cultural aspects connected to models of body slenderness and leanness. Some authors, such as Brunberg [23], found considerable data to support this concept. Among them, the following are particularly significant.

- A large number of books and magazines with marked tips for counting and controlling calories;
- The pressure exerted by the fashion industry that designer clothing specifically intended for small-framed or petite sizes;
- The film industry, which is not doubt an especially powerful and pervasive medium, including television, has always suggested that social success and happiness in love are linked to a svelt and trim figure;
- The increasingly insistent emphasis on physical exercise;
- The incongruent pressure to consume high caloric foods, such as snacks, especially as an alternative method to modulate emotions and achieve a positive mood;

It is clear that the objective of primary prevention must involve opposing these negative messages and, whenever possible, intervene to reduce their frequency and intensity, especially that which concerns children.

Development history and adolescent crisis

Striegel-Moore and Steiner-Adair [24] suggested an etiological perspective for development modalities. He discusses epidemiological data concerning the remarkable prevalence of these disorders in females and their onset during adolescence. He stresses the significant importance of the relational factors linked to a positive and attractive physical image in a female and her higher sensitivity to the dominant cultural

models. The progressive propagation and imposition of femininity and social success models connected to slenderness serve as the basis for women's greater vulnerability towards eating disorders.

With reference to the factors specifically connected to the adolescent crisis, Striegel-Moore and Steiner-Adair emphasise the negative role of the excessive family control exerted by relatives at the beginning of adolescence, when the female must develop a progressive and complete sense of independence. From this perspective, it is stressed that the emotional involvement and dependence on parents is higher in females as opposed to males, and also the parental control is usually more strict. The family conflicts that are inevitably triggered during the adolescence phase result in guilt and compromise the sense of amiability and self-esteem. This is particularly so with females. In this way, just in the crucial stage of adolescent re-organisation, a series of dysfunctional attitudes about the self is established.

Traumatic events

The presence of sexual abuse and of traumatic events in general in the medical history of patients with bulimia or anorexia is quite significant [5, 25]. However, some research suggests that the frequency of these events, although higher than in the normal population, is not statistically and significantly higher than that which is found in psychiatric patients [26].

Premorbid personological aspects

Within the cognitive literature, Guidano in particular, has isolated the personality features of patients who eventually go on to develop eating disorders [21, 22]. A crucial aspect of the subjects who develop eating disorders is a problematic self-esteem that may become stabilised only by means of a continuous search for confirmations from significant individuals. The risk of disappointing these individuals and subsequently losing a positive sense of self is always high. In the families of these subjects there is a very active tendency to stigmatise fat, as well as a remarkable emphasis upon body beauty and harmony. Therefore the concern of not being accepted and thus losing family approval is mainly centred round body appearance.

Another fundamental aspect of Guidano's theory is the ability to recognise and mediate one's own emotions and somatic feelings. As can be seen in Guidano's constructivist conceptualisation, the problematic sense of self-esteem and the perfectionist attitude are related to the presence of inner operative patterns developed and maintained within the dysfunctional relationship with unsuitable parental figures.

In this way, what Fairburn described in non-historical terms (here and now) presents with a clear biographic connotation, attributable to the development of events as well as an equally clear and important relational emphasis with extremely important implications for therapeutic treatment. In fact, if we consider that eating disorders are often observed in adolescents and young people who still live with their parents and continue sustaining the dysfunctional relational patterns, we have a difficulty in un-

derstanding how such a crucial aspect may be neglected both in the conceptualisation of the clinical case as well as in the assessment and the planning of treatment.

Decompensating key factors

All of the situations that may lead to an increase in anxiety and a lowered mood with a resulting increase in the problems relevant to self-esteem are considered as decompensating key events. Such triggering events involve separation or loss, the serious alterations in family homeostasis, and new and drastic demands from the environment, such as situations damaging for self-esteem (e.g., school failure). Very often, a crucial aspect in the development of anorexia is the initiation of a diet to normalise a situation of slight weight increase.

Development of the disorder and affecting factors

The course of eating disorders is usually insidious and, in cases of anorexia, may lead to death as a result of cardiac failure. One important aspect of therapy is identifying the vicious cycle of the disorder, which quickly stabilises the disorder and renders it progressively more lethal.

In the introduction, we previously mentioned what Fairburn describes as the behavioural and cognitive components. We have also previously stressed that in the classic behavioural model of the British School, the attention is focused only on the intrapsychic dynamics. However, the relational and the family dynamics in particular are additionally very important as well.

The maintenance of family relationships characterised by hyper-control, entanglement, blocking of development and independence is without doubt an unfavourable prognostic factor for which it is necessary to plan a family intervention that is therapeutic. However, in a complex situation, the role of biological factors in determining further vicious cycles capable of perpetrating the disorder must not be neglected. In anorexia, the act of fasting or the restricting of food, often triggered by the prescription or adoption of a severely hypo-caloric diet, progressively results in a series of consequences that create and subsequently maintains vicious cycles that can often be quite dramatic.

The effects of fasting have long been well known, and have also been copiously studied in the field of experimental research with the collaboration of volunteers [27]. The subjects underwent a drastic diet, during serious famines, similar to that which occurred in Russia between 1918 and 1922 [28].

The effects of fasting occur at different levels:

Cognitive: The compromise of abstract thoughts and obsessive focus on the cognitive activity concerned with food and eating.

Emotional: A condition of apathy and poor affective resonance occurs, in which the possibility of one's own physical decay and even death does not raise concern and fails to initiate active coping mechanisms. This can also be explained in the light of biological mechanisms and processes. The restriction in the caloric intake implies the activation of defensive mechanisms aimed at increasing the possibilities of survival.

Obviously, any emotional activation increases the body's caloric expenditure. Thus, dulling the emotional dynamics means saving calories.

Behavioural: After a transient phase of hyperactivity, a condition of abulia and hypoactivity is progressively determined.

Relational and social: Fasting implies a tendency to reduce social contacts, activating a process of gradual self-isolation.

Biological: Gradually, a stomach atonia and remarkable difficulty with digestion begins, which typically makes any attempt to increase food intake quite distressing.

The situation of post-prandial pain and suffering and the successive relief obtained either via means of fasting or self-induced vomiting may contribute to stabilising the situation of dietetic restriction.

As explained later in this text, these vicious cycles render any therapeutic intervention difficult, even beginning with the relationship establishment and development. Therefore, it is clear that one of the basic and preliminary aspects of the therapeutic project for anorexia must be the gradual lessening of food restriction.

The complex systems orientation

The prognosis for eating disorders is still severe [29] and the therapeutic methodologies are not yet well developed. With respect to bulimia, the only therapeutic orientations capable of demonstrating convincing experimental data is cognitive-behavioural therapy and Relational Psychotherapy. As for anorexia, no experimental data are yet available for any type of therapeutic approach; however, evidence of positive results obtained by integrated approaches where the cognitive-behavioural and the interpersonal aspect are associated with nutritional and biological interventions are being obtained.

In the past several years, at the Cognitive Psychotherapy and Rehabilitation Unit of the Psychiatric Clinic at the University of Catania, a series of multi-modal therapeutic interventions of cognitive and complex inspiration have been developed and targeted at treatment of bulimia, binge eating disorders, and mental anorexia. The therapeutic model proposed is strategically oriented, articulated in tactical, differentiated and flexible passages planned on the foundation of the individual clinical case assessment and results from the psychopathological, psychobiological and complex model previously described and verified during several experimental studies [30].

The Fineo and Tantalo protocols that follow are used for the treatment of bulimia nervosa and anorexia nervosa respectively imply a series of shared aspects and some that, on the contrary, are specifically studied for the specific aspects of the two different disorders. In any event, it is always convenient to surmise that the protocols are multi-dimensional, since they take into consideration the following intervention levels.

Biological level

Bulimia

The importance of this level results from the widely documented research data, indicating that bulimic patients possess an alteration in the nervous and endocrine

mechanisms of the hunger-eating behaviour-satiety cycle [31, 32, 33]. Therefore, the idea of employing a pharmacological intervention to attempt to initially correct as much as possible these altered mechanisms seems justified [34]. It is our opinion that the use of the pharmacological measure is not incompatible at all with a strategically oriented psychotherapeutic approach.

Within the authors' therapeutic approach in Psychiatry, the pharmacological intervention is therefore a tactical instrument capable of unblocking situations so serious that no schedule of psychotherapy is possible. If one thinks about the schizophrenic patients in the acute decompensation phase, or patients with manic mood disorders, or those affected with an obsessive-compulsive disorder, it is clear to see how pharmacotherapy works in this fashion.

In the case of bulimia nervosa, clinical pictures characterised by the presence of a great number of serious "binges", associated with self-induced vomiting and consequent disturbances in the electrolytic balance which, in turn, may cause cardiac arrhythmia, muscular paralysis, renal failure and epileptic crisis are quite common [35]. Under such circumstances, pharmacological intervention and the restoration of acceptable physical conditions are necessary and take absolute priority.

In the past five years, data collected on fluoxetine favoured an efficient therapeutic action, particularly in bulimia, of a substance capable of inhibiting in a selective way the serotoninergic re-uptake [36]. Several case experiences and two controlled outcome studies conducted by the team at the Psychiatric Department of the University of Catania have demonstrated a remarkable efficacy of fluoxetine, especially in reducing binges with an average dosage of less than 40mg daily [37]. Additionally, in serious cases where the previously mentioned physical complications are present or questionable, the therapy must initiate under hospitalisation in a specialised structure where a multimodal treatment is available. The Cognitive and Rehabilitation Therapy Unit which is under the auspices of the Department of Psychiatry Clinic at the University of Catania is an example.

Anorexia Nervosa

The biological level refers to fasting and the need to progressively halt its effects by a gradual increase in the caloric intake. Often the patient's life itself is in danger and it is therefore necessary to intervene in a controlled environment to support and restore a satisfactory functioning of the vital systems. The progressive increase in the supply of calories and essential foods is also useful in unblocking the condition of dysbulia and the increase coping skills, thus allowing the scheduling of a therapeutic strategy to unfold.

Behavioural level

The behavioural level is a very important step towards analysis, as will be demonstrated later, it is the initial target of the therapeutic intervention. Also in these disorders, the behavioural mechanisms consist of coping dysfunctional mechanisms,

which were learned to handle, albeit improperly, a series of emotional, cognitive and relational difficulties [24]. In time, the reinforcement processes tend to solidify these mechanisms and their self-maintenance establishes vicious cycles. The specific dynamics of bulimia and anorexia are quite different from a behavioural viewpoint, which is why they are described separately.

Bulimia Nervosa

The behavioural dynamics of this disorder may be brought back to a specific compulsive behaviour that is the eating behaviour itself. The binge and the resulting mechanisms used to limit its effect on the body weight, like self-induced vomiting and the use of laxatives, can be considered as rituals performed to reduce negative emotional conditions such as in the case of anxiety, sadness and frustration. The behavioural dynamics and the consequent vicious cycle may be summarised in the following terms:

- Trigger events
- Activation of negative emotional and cognitive conditions
- An attempt to reduce the above conditions by means of binges
- Anxiety reduction
- Activation of automatic thoughts about the risk of gaining weight and therefore of losing one's self-esteem
- Anxiety activation
- Reduction of anxiety through the behavioural modality of self-induced vomiting or use of laxatives
- Substantial binging and the resulting mechanisms aimed at reducing the consequences of the weight may be conceptualised as a bi-phasic compulsive process.

Anorexia Nervosa

With this form of eating disorder, avoidance is the dysfunctional coping mechanism adopted with this behaviour. For the anorexic patient, eating involves serious suffering at various levels.

Biological level: The difficulty in digestion and the resulting painful suffering after any meals.

Emotional level: For the anxiety reaction that is triggered

Cognitive level: For the automatic thoughts, the eating behaviour activates with the possibility of gaining weight

These negative consequences tend to progressively induce a process of active avoidance in the eating behaviour.

In conclusion, the conceptualisation in behavioural terms involves the following:

- Trigger: to feed oneself
- Intense anxiety reaction which decreases the gastric secretion and slows peristalsis
- Establishment of a serious distress condition

- Reduction of distress by self-induced vomiting
- Positive feelings of quietness and relief

This occurs in the anorexia variant where the food elimination measures are present

In the case of the just restrictive variant, the following dynamics are established

- Trigger: Thoughts of nourishing oneself
- Activation of a series of negative automatic thoughts and contemporary elicitation of an intense condition of anxiety
- Avoidance
- Relief

Emotional and cognitive level

The emotional level is characterised by the presence of negative emotional reactions such as anxiety, sadness and frustration that are mainly activated in the relational field. The cognitive level is characterised by a series of cognitive dysfunctions ascribable to both beliefs systems connected to forced self-esteem and the inevitable need to pursue an ideal body shape and perfectionism. Still at the cognitive level, we must consider the presence of many of the idiosyncratic cognitive dysfunctions in the human information processing system described by Beck, such as dichotomous thinking, generalisation, arbitrary inference, personalisation, magnification and minimisation.

Relational and family level

Bulimia

A substantial amount of experimental data in the professional literature, also confirmed by our research [38], show that binges are activated by negative emotions connected with the patient's life events but elicited by relational episodes where the patient felt she was refused, not esteemed or abandoned [39]. Therefore, another very important aspect in the therapy of bulimia nervosa is that involving family relations.

The bulimic patients' families were described as being characterised by high enmeshment, as well as over-protective behaviours and particular attentiveness to preserving the formal aspects of a situation at any cost. The behavioural rules are typically very strict and likewise all expressions of individuality and diversity of each component of the family are excluded from the system. As a whole, the patients appear to be unassertive, dependent individuals, anguished by a tumultuous upbringing and extremely fearful of the judgement of the others. They are often prone to please others in just about any way possible in order to avoid conflict. On the other hand, during the crucial phase of the development of the patient's cognitive system, a family environment such as the one just described, implies an unlikelihood of reaching an adequate definition of self due to the perennial condition of ambiguity, unsettlement, and substantial mystification, which characterises the parenting process. At this point,

the opinion of others is the only criterion by which the subject may define himself, thus acquiring a meaning of total confirmation or non-confirmation. In this view, the intense search for approval of the bulimic, as well as his high sensibility towards negative judgements, is absolutely consistent.

An interesting description of the typical structure of the bulimic patient's family is provided by Schwartz, et al. [40]. According to these authors, the family of the potential bulimic patient is strictly and firmly inserted in a "spread" network where other relatives, besides parents and brothers, play a stable and significant role. These families develop functional features useful for the maintenance of the rigid network rules but strictly bound to the implicit rule of exclusion of any possible evolution in the system, including the realisation by the "focal" subject of a personal network with new rules and new significant figures. For the members of each family it is difficult to establish deep relationships because each relational exchange must be shared by all of its components. The father has maintained close relationships with his parents and brother; the mother spends little time with her original family group; moreover, each of the family members is involved in the others' conflicts. The children usually never venture away from this network at all, so that their parents never have to face the empty nest syndrome. This implies, however, that they will never have a very close and exclusive relationship. Loyalty to the network and its rules is fundamental; strangers are considered as potentially hostile. Children are trained to be subject to the rules of the clan, respectful of all relatives and hierarchies rather than encouraged to develop their own sense of self and a personal ambition to perform. Finally, eating is a very important aspect to retain group cohesion, within which eating together is considered almost as a ritual by itself, the source of joy and calm.

These studies, reported by Schwartz, et al. were conducted in the United States of America. A certain amount of the data from our observations in Sicily is supportive of the outcome obtained by the American study. Moreover, we have observed that sometimes there is an odd tendency of these families, which join networks like those previously described, to build houses where a certain number of families, all relatives, reside together, often in different levels of the same home. They all meet in one of the houses to have meals together. Several of our female bulimic patients reported they were reared with grandmothers, great-aunts, aunts, female cousins, all of them suffocating and inclined to make them eat "until they burst" without any possibility of refusing the food since this would be perceived as a lack of respect.

From what has been said, the importance of increasing the bulimic patient's independence and social competence, of promoting his/her emotional detachment and sometimes the physical estrangement from the family and, whenever possible, of conducting a family therapy aimed at modifying his emotional and relational patterns typical of the bulimic patients families is quite obvious.

Anorexia

In the family of female anorexic patients, there is a prevalence of rigid controlling attitudes that are aimed toward the patient [41]. This control, unlike the bulimic

patient, is not exerted with enmeshment and strategies of normative validation but rather under drastic and often violent conditions. Using the assessment categories of the Expressed Emotion, based on several personal observations of ours, we may say that, unlike the bulimic patients' relatives where the emotional hyper-involvement prevails, the anorexic patients' relatives reveal a higher presence of hostility and criticism. The mothers of anorexic females are often beautiful women, endowed with a high feeling for aesthetics, order and social rules. The control over the daughter is very strict, from assumptions about food to clothes, social, and above all, love relationships. Sexuality is characterised as something negative and degrading, while mystical exaltation and spirituality are highly appreciated. With bulimic patients' families, the enabling phrase is - Everything is all right, we are perfectly happy and satisfied! – With the families of anorexic patients, the phrase is - Everything would be all right and we would be happy and satisfied if our relatives were not so intent on being imperfect!

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