

Theses of (PhD) doctoral work

*The epidemiological and psychological aspects of eating disorders
especially considering autobiographical memories*

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Debrecen, 2011.

Definition of the topic and the objectives of the doctoral dissertation

Anorexia nervosa and bulimia nervosa, the two types of eating disorders are considered today's civilization diseases. The growing interest showed towards eating disorders has a number of reasons. The prevalence of eating disorders among adolescent girls and young women is relatively high, and it has a growing tendency (Túry and Szabó, 2000). Anorexia has the highest mortality among psychiatric disorders (Steinhausen, 2002). The eating disorders if they are not recognized and treated, can become chronic and they can have multiple somatic complications, and can be characterized by high psychiatric comorbidity.

At the beginning eating disorders were often considered to be culture-bound syndromes, occurring mainly in industrialized Western countries. In the last decades a few epidemiological studies were published in Eastern European countries, which show that eating disorders are also wide-spread in this region.

Epidemiological studies made in the field of eating disorders show that the prevalence of anorexia nervosa between young women is 0.3 to 1%, and the prevalence of bulimia nervosa is 1-3% (Fairburn and Beglin, 1990; Rastam et al, 2004; Hoek, 2006; Szumska et al, 2008).

The development of eating disorders can be explained based on a multidimensional model. This approach considers that the development of eating disorders is influenced by predisposing, precipitating and illness maintaining factors (Túry and Szabó, 2000).

Predisposing factors can be individual, familial and sociocultural factors. Precipitating factors are dieting, depression, anxiety and maladaptive coping behaviors. The illness maintaining factors can be multiple but one of the most important factor is starvation. Hunger has a negative effect on thinking, on the emotional state and behavior.

In Romania, there live several large minorities alongside the Romanian majority (Hungarian, Gipsy, Saxon, etc.). Information about ED in different cultures allow us to formulate hypotheses on the social factors that contribute to their etiology. Several cross-cultural studies regarding ED were made but we consider very important and interesting to make an ethnical comparison in Romania between the Hungarian minority and the Romanian majority. In the past decades, Romania has undergone many political and social changes and particularly these changes might have created a proper ground for the development of eating disorders.

The purpose of this study was to conduct an epidemiological research among Romanian, Hungarian and Saxon adolescents in Romania and to observe if there are significant differences concerning the prevalence of eating disorders between these cultures.

Another important goal of the present paper was to analyze the autobiographical memory functioning of the patients suffering of anorexia nervosa. Autobiographical memory refers to the memory for events related to the individual, including memories for specific experiences and memories for the personal facts of one's life - memories that are not part of a generic script or semantic memory, but which form the personal autobiography.

Conway (1995) considers that autobiographical memory is organized hierarchically. On the top of the hierarchy are the life stories which are representations for longer periods and they are rather vague. Life stories are followed by general memories which are more heterogeneous than life-stories and they represent events which occur often. The event-specific memories are on the bases of the hierarchy and they are representations of the personal experiences, which are vivid memories.

In the context of the mood and memory research, Williams & Broadbent (1986) studied patients a few days after they had been hospitalized because of a serious suicide attempt. Despite the fact that they were prompted to retrieve specific memories to positive or negative cue words (e.g., happy, angry), the patients tended to retrieve more general memories than normal controls as a first response to the cues. They did retrieve specific memories but significantly fewer in number than the control group. A specific memory is defined as 'a memory of something that happened at a particular place and time and took no longer than a day to occur and it happened only once'.

This lack of memory specificity has been observed in several studies: in depressed patients, in patients with bipolar depression and in patients suffering from PTSD (Hermans et al, 2004; McNally et al, 1995).

According to Williams (1996), patients with emotional disturbance adopt a less specific memory type as a coping strategy for regulating negative affects.

A fully functioning and coherent affect regulation performs two functions. One is to attenuate the negative affects and to help the self to process and assimilate the negative experiences and to integrate them. The other is to create positive affect, based on the past life experiences processed, reinforcing the self in problem solving process. Affect-regulation is the ability of a person to reduce the negative emotions and to create positive ones. The literature published on eating disorders shows that anorexic patients have a dysfunctional affect regulation. They are characterized by cognitive biases and extreme focusing on

negative affects (Karwautz et al., 2001). In anorexic patients the negative emotional reactions persist, and make it difficult to process and assimilate the emotional experiences. These patients are dominated by this negative emotional state and they have no skills to cope with it (Lask & Byant-Waugh, 2007). They have different cognitive and behavioral strategies to diminish their negative affects (e.g. eating disorders symptoms like: dieting, hyperactivity, overeating or vomiting). A cognitive avoidance strategy can be the overgenerality of the autobiographical memory.

Many studies analyzed the information processing, decision making and selective memory biases in eating disorders, but only a few studies were conducted regarding autobiographical memory functioning (Dalglish et al, 2003; Nandrino et al, 2006).

We focused the present research on the autobiographical memory functioning in girls suffering from anorexia nervosa, taking into account the level of depression.

The present study has two important objectives. 1.) To analyze among adolescents from Transylvania the prevalence of clinical and subclinical eating disorders, the eating attitudes and the cognitive distortions. 2.) To analyze the autobiographical memory functioning of patients suffering of anorexia nervosa.

Methods

Study group

The prevalence of eating disorders was analyzed during two researches. The first research was conducted in 2001 among Romanian, Hungarian and Saxon high-school students from Transylvania (n = 1 621). The second research was conducted also in Transylvania, in 2006 and 2396 Romanian and Hungarian adolescents participated in the research.

To analyze the autobiographical memory functioning in eating disorders, thirty-eight anorexic patients were selected from the 1st Department of Pediatrics, Semmelweis University, Budapest, Hungary. The control group consisted of forty-seven girls. They participated voluntarily in the study, and they were matched for age and level of education to the patients' group.

Instrumentation

We used the Eating Attitudes Test (Garner and Garfinkel, 1979), The Bulimia Cognitive Distortion Scale (Schulman et al, 1986), The Eating Behavior Severity Scale (Yager et al, 1987) and questions regarding demographic and antropometric data, to assess the prevalence of clinical and subclinical eating disorders, eating attitudes and cognitive distortions of the adolescents.

The autobiographical memory of anorexic patients and the group of healthy teenagers was analyzed using the Autobiographical Memory Test (Williams and Broadbent, 1986), a list of anorexia-related cue words, the Children's Depression Inventory (Kovacs, 1985) and the Eating Disorder Inventory (Garner et al, 1983). We used 24 cue words (8 positive, 8 negative and 8 neutral words) to assess the specific autobiographical memory of the participants. Specific memory refers to an event that happened only once and lasted one day or less. We completed the list of autobiographical memory cues with eight anorexic cue words. We expected the girls suffering from anorexia nervosa to recall fewer specific memories to anorexia-related words than to positive and negative cues due to the emotions associated with these cue words.

Results

The results of the two epidemiological studies:

- Overall, our results show that eating disorders are a problem in Transylvania, at least as common as in Western countries and other Central and Eastern European countries.
- In our first study the prevalence of anorexia nervosa (AN) was 0.5% in the Hungarian female sample and 0.2% in the Romanian female sample. The prevalence of subclinical AN was 1.1% in the Hungarian, 3% in the Romanian and 0.5% in the Saxon females. The prevalence of subclinical anorexia nervosa was higher in the Romanian females comparing to Hungarians and Saxons. The prevalence of bulimia nervosa (BN) was 0.5% in the Hungarian, 1.2% in the Romanian, and 0.5% in the Saxon females. The prevalence of subclinical BN was 0.5% in the Hungarian female sample, 2.2% in the Romanian, and 1.1% in the Saxon female sample. We have not found clinical or subclinical eating disorders in the male sample.
- In our second research the prevalence of anorexia nervosa (AN) was 0.6% in the Romanian female sample and no clinical cases of AN were found in the Hungarian female sample. The prevalence of subclinical AN was 0.4% in the Hungarian female sample and 1.9% in the Romanian sample. The prevalence of bulimia nervosa (BN) was 1% in the Hungarian and 1.3% in the Romanian female samples. The prevalence of subclinical BN was 0.8% in the Hungarian female sample and 0.7% in the Romanian female sample. We have not found clinical or subclinical AN in the male sample but the prevalence of BN was 0.2% in the

Hungarian male sample. The prevalence of subclinical BN was 0.3% in the Hungarian male sample and 0.5% in the Romanian male sample. There were no significant differences between the two researches regarding the prevalence of clinical and subclinical eating disorders.

- In the first study the percentage of the females reporting disordered eating habits was between 7.4% and 11.1%. In the second research the percentage of the females reporting disordered eating habits was significantly lower than in the first study. The Romanian girls had a higher score on the Eating Attitude Test than the Hungarian girls.
- The Romanian and the Hungarian females had a higher score on the Bulimia Cognitive Distortion Scale compared to the Saxons. The percentage of the females reporting cognitive distortions was between 20.5% and 31.4%.
- The frequencies of binge eating and counter regulative behaviors to prevent weight gain in the two studies were frequent. The most frequent counter regulative behavior in males and females was the physical exercise. The physical exercise was more frequent in the Romanian female sample compared the Hungarian females. In the second study the adolescents exercised less than teenagers from the second study. The frequency of binge eating was also higher in the Romanian female sample compared to the Hungarians.
- Summarizing the results we can conclude that the prevalence of eating disorders in the Romanian, Hungarian and Saxon adolescents from Transylvania can be explained by the interaction of multiple factors. In addition to body dissatisfaction, an important role in the development and perpetuation of eating disorders can have the abnormal eating attitudes and cognitive distortions, the excessive identification with Western values, the affiliation to a different ethnic or religious group and the media.

The autobiographical memory characteristics of the anorexic and control group can be summarized as follows:

- The restrictive anorexic patients retrieved a greater proportion of categoric and extended memories and fewer specific memories than the control group for each category of cue words (positive, negative, neutral and anorexia-related).
- The patients suffering from restrictive anorexia recall fewer specific memories to the illness-related cue words than to the negative, positive or neutral ones.

- The anorexic patients produced more first memories that were overgeneral and less specific memories when controlled for the level of depression. We can conclude that not depression but the diagnosis of anorexia nervosa is responsible for the autobiographical memory deficits in our patients group.

Conclusion

The prevalence of eating disorders in the Romanian, Hungarian and Saxon adolescents from Transylvania can be explained by the interaction of multiple factors. In addition to body dissatisfaction an important role in the development and perpetuation of eating disorders can have the abnormal eating attitudes and cognitive distortions, the excessive identification with Western values, the affiliation to a different ethnic or religious group and the media.

The overgenerality of the autobiographical memory can be a cognitive avoidance strategy for regulating negative emotions. The improvement of specific autobiographical memories could be an important objective in the therapy process of eating disorders.

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