

The influence of the family on the formation of eating and weight disorders

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Abstract

The aim is to study family influence on formation of eating and weight disorders. The concept of an “*alimentary family*” is defined as a family with dysfunctional, disharmonious relationships, which is a prerequisite for emergence and support of distorted patterns of eating behaviour, leading in the future to children’s eating and weight disorders.

Methods: The research was carried out using the method of a thematic retrospective analysis (MTRA)-food, which is a variant of the narrative method, the questionnaire “Parental convictions and control tactics as for eating behaviour of their children during food taking”. The data was processed by the content analysis method; Fisher’s ϕ -criterion was used to compare differences between the groups.

Results: The research has allowed us to clarify eating behavioural characteristics and to identify the “roots” of eating disorders. Various forms of forcing at eating, direct and indirect ways of making children to eat or blocking of eating are manifested in ignoring of children’s taste preferences, their desire and readiness to eat. Parents often use manipulative techniques influencing children’s eating behaviour (encouragement, inducement, reward promises, approval, recognition, warning, or switching attention), direct means of influence (coercion: prohibition, restriction, rejection, destructive criticism, intimidation, deprivation from various pleasures). There is the statistical confirmation that parents’ use of manipulative means and / or direct coercion towards their children during eating predetermines formation of pathological processes of corporeality, attitudes and psychological mechanisms stipulating eating disorders.

Conclusions: The research results indicate necessity to develop psychotherapeutic programs for people with eating disorders, as well as programs to help parents improve family relationships and, accordingly, to apply correctional effects on their children.

Keywords: alimentary family, psychosomatic family, eating disorders, weight disorders eating behaviour, parental control tactics.

Streszczenie

Celem jest zbadanie wpływu rodziny na powstawanie zaburzeń odżywiania i wagi. Pojęcie rodziny alimentarnej definiuje się jako rodzina z dysfunkcyjnymi, dysharmonijnymi związkami, które są warunkiem wstępnym do pojawienia się i utrzymania zniekształconych wzorców żywieniowych, co w przyszłości powoduje zaburzenia odżywiania i wagi ciała u dziecka.

Metody: Badanie przeprowadzono z wykorzystaniem metody retrospektywnej analizy tematycznej MTPA-jedzenie, która jest typem metody narracyjnej, kwestionariusza „Przekonania rodzicielskie i strategii kontrolowania zachowań żywieniowych dzieci w sytuacji jedzenia” (Shebanova, 2016). Dane przetwarzano metodą analizy treści, do porównania różnic między grupami zastosowano test Fishera.

Wyniki: Badanie pozwoliło wyjaśnić rodzaje zachowań żywieniowych i zidentyfikować „korzenia” zaburzeń odżywiania. Różne formy przemocy żywieniowej, bezpośrednie i pośrednie środki przymusu lub blokowania aktywności żywnościowej polegają na ignorowaniu preferencji smakowych dzieci, ich pragnienia i gotowości do jedzenia. Rodzice często stosują techniki manipulacyjne, aby wpływać na zachowania żywieniowe dzieci (zachęta, nakłanianie, obiecywanie nagrody, pochwała, uznanie, ostrzeżenie, zmiana uwagi), bezpośrednie środki wpływu (przymus: zakaz, ograniczenie, odrzucenie, destrukcyjna krytyka, zastraszanie, pozbawienie różnych przyjemności). Potwierdzono statystycznie, że stosowanie przez rodziców manipulacji i/ lub bezpośredniego przymusu wobec dzieci w sytuacji jedzenia determinuje powstawanie patologicznych procesów cielesności, postawy i mechanizmy psychologiczne warunkujące zaburzenia odżywiania.

Wnioski: Wyniki badania wskazują na konieczność opracowania programów psychoterapeutycznych dla osób z zaburzeniami

odżywiania, a także programów pomagających rodzicom poprawić relacje rodzinne i, odpowiednio, zastosować efekty korekcyjne na swoich dzieciach.

Słowa kluczowe: rodzina alimentarna, rodzina psychosomatyczna, zaburzenia odżywiania, zaburzenia zachowań żywieniowych, taktyki kontroli rodzicielskiej.

Introduction

The scale of eating disorders is significant all around the world. It threatens the physical and psychological health of the population in many countries, so researches on predictors for eating disorders are urgent and necessary.

Modern researchers have turned their attention to the factors and features of alimentary-dependent diseases: obesity, psychogenic overeating, anorexia, bulimia [1-8]. It has been found that the majority of people with eating disorders are characterized by the certain behavioural features and personal traits: inability to make decisions, excessive attachment to the mother, expectations of support and guidance from parents, believe in own inability to be successful and to independently solve own problems [9, 10]. Most of these features are formed in families, but the family aspect of this problem is poorly studied, which determines the relevance of the research on families' role in eating disorder formation.

The aim is to study family influence on formation of eating and weight disorders.

The concept of an "alimentary family" (from lat. *alimentarius* – edible) is associated with such concepts as "psychosomatic family" [11], "psychosomatic mother" [1, 2, 11-14]. An alimentary family means a family with dysfunctional, disharmonious relationships, which are a prerequisite for emergence and recursive support of distorted patterns of eating behaviour within the pathological spectrum "overeating – restriction in food". It further leads to the pathological developmental pattern – the children's eating and weight disorders.

The generalization of the research results concerning eating disorders (anorexia, bulimia, compulsive overeating) [2-7, 12], overweight and obesity [1-4; 8; 10] allows us to distinguish the features of alimentary families, creating preconditions for eating disorder emergence: family traditions of eating, in particular, the "cult of tasty food", and family standards of "body image"; hyperinclusion of each family member to the life of other members, in particular parents' intrusion into life of their children, impeding development of children's independence; orientation of children to leadership and success with parallel restrictions of their need for independence, imposition of the idea of lack of their competence; rigorous family relationships; the tendency to avoid open discussions on conflicts and personal

position expression; parents' inability to recognize and identify physical conditions of their children; restraining form feeling manifestations.

Methods

The research was carried out using the method of a thematic retrospective analysis (MTRA)-food, the questionnaire "Parental convictions and control tactics as for eating behaviour of their children during food taking" [15]. The MTRA-food method is based on a biographical method that reconstructs an individual's lifestyle at whole to identify sustainable ways of his/her interactions with factors of macro- and micro-environment. The discourse analysis was used as a method for detecting of meanings; in this case, an individual's subjective discourse is considered as an attractive meta-filter, determining development of his/her eating behaviour.

Research procedure: the respondents were invited to mention the most significant moments of their lives related to the situations of eating (particularities of eating in their families, their attitudes to food, conflict situations in connection with eating, etc.). During *data analysis*, the main semantic categories were distinguished: assessment of a situation in general, behavioural responses in the dyad "parents-their child", social guidelines as for eating behaviour, semantic values of food, etc. This allowed us to identify significant moments associated with stereotyped patterns of eating behaviour.

Statistical techniques. The data was processed by the method of content analysis; Fisher's ϕ -criterion was used to compare differences between the studied groups.

Participants. The research was conducted on the samples of high school seniors in Kherson (N = 282 persons, including, 157 girls and 125 boys, average age 15.9 years) and university students of the I-V academic year (N = 285 participants, including 162 girls and 123 boys, the average age is 19.2 years).

The respondents were asked to write an essay on "My attitude to food" and answer questions about their own body and weight (satisfaction / dissatisfaction with their weight; intentions as for their own weight, whether there is the desire to gain or decrease their weight with indication of specific values; anthropometric data – gender, height and weight). The definition of "weight" was considered as a psychosomatic phenomenon of corporeality, manifested in the continuum, "norm – pathology" and as a peculiar somatic equivalent of distorted patterns of

eating behaviour. Weight disorders were determined on the base of IMT, which takes into account correlations of height, body weight and age and compares the results with generally accepted tabular values [15]. The studied groups were formed according to the criterion of *satisfaction / dissatisfaction with own weight* and an intention to *reduce / gain the weight*:

1. satisfied with their weight (N = 62) – group 1;
2. dissatisfied, with a real excess weight, seeking to reduce their weight (N = 147) – group 2;
3. dissatisfied and wishing to lose weight, although it is in line with the norm or even below the norm (N = 227) – group 3;
4. dissatisfied and wish to gain weight (with a real deficit of weight or with a weight that corresponds to normative indicators, N = 131) – group 4.

There were no individuals, among the participants of this research, with clinical form of "avoidant/restrictive food intake disorder (according to ICD-10) and "eating disorder" (according to DSM-V) [17]. However, as we can see from the text, respondents from groups 2, 3, 4 can be attributed to the level of prenosological symptoms.

Research results

The total number of situations described was 3212; their analysis allowed us to identify adults' strategies and tactics to control eating behaviour of their children. Among the determined semantic blocks, "forcing to eat" predominates in all groups of respondents; moreover, in the memoirs, the frequency of semantic elements representing forcing children to eat in their families is significantly higher than that related with children's educational institutions (74% vs. 12% , $p \leq 0.01$); the initiators of forcing are most often grandmothers (40%) or mothers (31%); while fathers (16%), grandfathers (7%), other relatives (6%) show such behaviour significantly fewer; manifestations of forcing to eat in families for the groups of "dissatisfied with weight" are more frequent than those in the group of "satisfied with weight" (88% vs. 27%, $p \leq 0.01$ $\varphi^*_{emp} = 9.616$).

Means of influence, such as parents' specific tactics to control their children's eating behaviour, were conditionally divided into two groups: *manipulative means* and *violent means*. The performed analysis has shown that manipulations appear significantly more often during

Table 1. Means of parental control over their children's eating behaviour in an eating situation*

The semantic blocks of control means as for eating behaviour	Semantic categories	Data distribution of the respondents groups in %			
		Gr. 1	Gr.2	Gr. 3	Gr. 4
Manipulative means	incitement	39	62 $p \leq 0.01$ $\varphi^*_{emp}=3.09$	45	68 $p \leq 0.01$ $\varphi^*_{emp}=3.85$
	positive and negative suggestions	21	82 $p \leq 0.01$ $\varphi^*_{emp}=8.605$	78 $p \leq 0.01$ $\varphi^*_{emp}=8.465$	43 $p \leq 0.01$ $\varphi^*_{emp}=3.062$
	switching attention to other objects during eating	29	94 $p \leq 0.01$ $\varphi^*_{emp}=9.938$	51 $p \leq 0.01$ $\varphi^*_{emp}=3.182$	72 $p \leq 0.01$ $\varphi^*_{emp}=5.741$
Direct forms of forcing during eating	tactics of rejection	8	34 $p \leq 0.01$ $\varphi^*_{emp}=4.411$	65 $p \leq 0.01$ $\varphi^*_{emp}=9.093$	17 $p \leq 0.05$ $\varphi^*_{emp}=1.739$
	destructive criticism: tactics of non-acceptance	7	37 $p \leq 0.01$ $\varphi^*_{emp}=5.19$	43 $p \leq 0.01$ $\varphi^*_{emp}=6.406$	12
	restrictions, threats, physical punishment	8	64 $p \leq 0.01$ $\varphi^*_{emp}=8.426$	53 $p \leq 0.01$ $\varphi^*_{emp}=7.341$	26 $p \leq 0.01$ $\varphi^*_{emp}=3.198$
Punishments in the form of deprivation of pleasures	deprivation of "non-edible" pleasures	11	65 $p \leq 0.01$ $\varphi^*_{emp}=7.799$	78 $p \leq 0.01$ $\varphi^*_{emp}=10.321$	47 $p \leq 0.01$ $\varphi^*_{emp}=5.391$
Food as a mean of influence	deprivation of edible pleasures	8	64 $p \leq 0.01$ $\varphi^*_{emp}=8.426$	35 $p \leq 0.01$ $\varphi^*_{emp}=4.78$	18 $p \leq 0.05$ $\varphi^*_{emp}=1.992$
Food as a mean of positive influence	positive blackmailing	12	65 $p \leq 0.01$ $\varphi^*_{emp}=7.475$	47 $p \leq 0.01$ $\varphi^*_{emp}=5.429$	53 $p \leq 0.01$ $\varphi^*_{emp}=5.774$
	food as a reward	17	38 $p \leq 0.01$ $\varphi^*_{emp}=3.051$	18	41 $p \leq 0.01$ $\varphi^*_{emp}=3.412$
	food as a mean for comforting	11	83 $p \leq 0.01$ $\varphi^*_{emp}=10.605$	57 $p \leq 0.01$ $\varphi^*_{emp}=7.125$	22 $p \leq 0.05$ $\varphi^*_{emp}=1.901$

*The table shows the statistical differences between the indicators of group 1 (satisfied with their weight) and other studied groups.

pre-school and primary school years, when children are more obedient and easier to control, so adults have ample opportunities to influence or press. Thus, the percent of situations describing compulsory eating is 73% up to 7-8 years old, 43% in the period from 9 to 13 year old, 21% after 13 years. The general distribution of parental control means related to eating behaviour in the situations of food taking by the determined semantic categories and corresponding semantic blocks is presented in the table 1.

Conflict of interest

The authors have declared no conflict of interest.

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Otrzymano: 19.11.2019
Zrecenzowano: 28.11.2019
Przyjęto do druku: 11.03.2020