

The Role of Personality and Pubertal Development in Eating Disorders: a European Discordant Sister-pair Study.

C. Paganini¹, I. Krug², M. Fuller-Tyszkiewicz³, G. Peterson¹, M. Anderluh⁴, D. Collier⁵, F. Fernandez-Aranda⁶, A. Karwautz⁷, G. Wagner⁷, N. Micali⁸, J. Treasure⁹

¹Pharmacy, University of Tasmania, Hobart, Australia ; ²Psychology, University of Melbourne, Melbourne, Australia ; ³Psychology, Deakin University, Melbourne, Australia ; ⁴Psychiatry, University Psychiatric Hospital Ljubljana, Ljubljana, Slovenia ; ⁵Institute of Psychiatry, King's College London, London, United Kingdom ; ⁶Psychiatry, University Hospital of Bellvitge, Barcelona, Spain ; ⁷Child and Adolescent Psychiatry, Medical University of Vienna, Vienna, Austria ; ⁸Institute of Child Health, University College London, London, United Kingdom ; ⁹Institute of Psychiatry, King's College London, London, United Kingdom

Background

Puberty has been found to be a major risk period for the onset of eating disorders (EDs). The experience of puberty can, however, be very different depending on the adolescent's personality. It is currently unknown how the interplay between personality and experiences of pubertal development are related to subsequent EDs.

Objective

To investigate the timing of puberty and attitudes towards puberty in ED patients when compared to their healthy sisters, and to assess the relationship between pubertal risk factors, ED symptoms and personality.

Method

The sample consisted of 354 discordant sister-pairs. Pubertal risk factors were assessed through the Oxford Risk Factor Interview (ORFI) and the EATATE-1. ED symptoms and personality traits were also assessed.

Result

ED patients displayed a later age of menarche, and reported feeling less prepared and more distressed towards pubertal changes than their healthy sisters (see Table 1). While only a few pubertal risk factors were related to ED symptoms, significantly higher Harm Avoidance and Childhood Obsessive-Compulsive traits (both p<0.05) and lower Self-Directedness (p<0.01) scores were related to negative attitudes toward puberty.

Conclusion

Later age of menarche and negative attitudes towards puberty act as important risk factors for EDs. The assessment of personality provides important insights into which girls struggle with pubertal development and could therefore be at increased risk for later EDs.

Table 1: Differences in eating disorder patients and sisters for the pubertal risk factors

	ED vs. Sisters (N=354 pairs)		AN vs. Sisters (N = 143 pairs)		ANBN vs Sisters (N = 134 pairs)		BN vs. Sisters (N = 77 pairs)	
	ED	Sisters	AN	Sisters	ANBN	Sisters	BN	Sister
ORFI N (%)								
Early breast development	64 (18.1)	62 (17.5)	19 (13.3)	21 (14.7)	27 (20.1)	26 (19.4)	18 (23.4)	15 (19.5)
Breast Embarrassment	120 (33.9) **	88 (24.9) **	47 (32.9)*	33 (23.1)*	48 (35.8)	35 (26.1)	25 (32.5)	20 (26)
Teasing about breasts	54 (15.3) **	35 (9.9) **	17 (11.9)	11 (7.7)	24 (17.9)	16 (11.9)	13 (16.9)	8 (10.4)
Menstruation negative feeling	63 (17.8) **	45 (12.7)**	29 (20.3)	19 (13.3)	24 (17.9)	17 (12.7)	10 (13)	8 (10.4)
Not preparation for menstruation	69 (19.5)*	42 (11.9)*	21 (14.7)	16 (11.2)	31 (23.1)*	18 (13.4)*	17 (22.1)	9 (11.7)
EATATE Mean (SD)								
Age of menarche (yrs)	12.9 (2.2)***	9.09 (5.7)***	12.9 (2.2)*	9 (6.0)*	12.8 (2.5)	8.4 (5.9)	12.5 (3.4)	10.5 (5)

Analyses are based on McNemar tests for ORFI and Wilcoxon signed-rank test for EATATE, which were used for paired comparisons between ED patients and healthy sisters
* p<0.05; ** p<0.01; *** p<0.001