

RESEARCH

## Change in the frequency of consultations concerning eating disorders in the Department of Child and Adolescent Psychiatry in Kraków (Poland) in the years 1988 – 2004

Maciej Wojciech Pilecki, Agnieszka Nowak, Magdalena Zdenkowska-Pilecka

### Summary

**Aim.** In the opinion of both clinicians and the general public, eating disorders (ED) among girls constitute one of the fastest growing groups of mental disorders in Polish children and adolescents. However, this conviction is only partly supported by reliable scientific research (both in Poland and in other countries of the former Soviet block). The issue of the increase in frequency of ED occurrence in Poland after the (political and socio-economic) transformation of 1989 is scientifically extremely important. Findings relating to this issue could be a starting point for further research on socio-cultural aspects which may be significant in the development of anorexia and bulimia nervosa.

**Material and method.** In the study, reasons for first time attendance at psychiatric consultations by girls aged 12 – 21 at the Outpatient Unit of the University Department of Child and Adolescent Psychiatry in Kraków in 1988, 1996, 2000 and 2004 were analysed. The study took into account data from ambulatory records of 788 patients. Additionally, the dynamic of changes in consultations frequency in relation to a number of socio-demographic variables was analysed.

**Results.** The frequency of first time consultations due to eating disorders increased from 5 cases in 1988 to 90 cases in 2004. This constitutes the largest increase both in absolute numbers and percentage value in comparison to other groups of disorders. Additionally, the dynamic of changes in consultations frequency in relation to such variables as: age, type of place of residence (village/city), living in Kraków/outside Kraków, population of the place of residence were analysed. Girls from the ED group turned out to come from smaller cities than girls with depressive symptoms.

**Conclusion.** The obtained results may thus constitute a significant argument supporting the hypothesis of an increase in eating disorders in the population of young girls in Poland.

**eating disorders / change in consultation frequency**

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**Maciej Wojciech Pilecki<sup>1</sup>, Agnieszka Nowak<sup>2</sup>, Magdalena Zdenkowska-Pilecka<sup>1</sup>:** <sup>1</sup>The Department of Child and Adolescent Psychiatry, Jagiellonian University, Collegium Medicum, Kraków, Poland. <sup>2</sup>Psychiatry Department, Municipal Hospital, Olkusz, Poland; Correspondence Address : Maciej Pilecki, The Department of Child and Adolescent Psychiatry, Jagiellonian University, Collegium Medicum, 21 a Kopernika Str., 31-501 Kraków, Poland ; E-mail : mzpileck@cyf-kr.edu.pl

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### INTRODUCTION

A number of studies and meta-analyses of scientific reports, most of them concerning Western countries, indicate an increase in the frequency of anorexia nervosa occurrence from the 1930's to the 1980's. The largest increase was observed among teenage girls and young

women. In the 1990's, curbing of this trend was observed. Data concerning bulimia are less clear and explicit. Some studies indicate a decrease in bulimia occurrences in the last decade of the twentieth century [1, 2, 7, 8].

Views regarding the increase in occurrence of eating disorders in the 20<sup>th</sup> century are also discussed and contested. The more frequent diagnosis of the disorders is viewed as being related to methodological errors in conducting studies and research, changes in diagnostic criteria, improved access to specialized health-care, changes in the quality of reported cases, demographic changes, accumulation of cases in a population, and flawed counting of subsequent hospitalizations [3].

In the opinion of both clinicians and the general public, eating disorders among girls have become one of the fastest growing groups of mental disorders of the developmental period in Poland. The increase in the problem is linked with the process of rapid socio-cultural changes observed in Poland after the democratic transformations of 1989. Eating disorders seem to be a highly sensitive barometer of the cultural changes that occur in the process of westernisation [10]. This phenomenon was first identified in Japan and later in many other countries, including East European countries [6]. In the latter, it seems that the iron curtain caused a delay in cultural development rather than significant culture differences. It was also postulated that the iron curtain delay made the process less evident [6].

However, the conviction about the increase in prevalence (of eating disorders among girls) is only partly supported by reliable scientific research both in Poland and in other countries of the former Soviet block. Before 1989, this problem had never been systematically studied in Eastern European countries both due to the minimal extent of the phenomenon and to problems of a methodological nature [4, 11]. A few epidemiological studies have provided data on this matter – however, the findings have often been paradoxical and difficult to interpret unambiguously. Nevertheless, there are many indications that before the political transformations of the late 1980s, the problem of eating disorders in Eastern Europe (including Poland) mainly concerned girls who

were studying, with a tendency in subsequent years to spread to less educated layers of society. In the nineteen nineties, the intensity of eating disorders reached a level close to that observed in Western Europe and the United States [10]. In a two-phase epidemiological study conducted by Katarzyna Włodarczyk-Bisaga on a population of 747 first grade secondary school schoolgirls of one of Warsaw's districts published for the first time in Polish in 1992, there were no subjects who met full diagnostic criteria for eating disorders, and 2.34% presented symptoms of a subclinical exacerbation [11]. In a 1999 study conducted on a group of first grade girls of Kraków's secondary schools, there were no cases that met full diagnostic criteria for anorexia nervosa. There were three cases that met full diagnostic criteria for bulimia nervosa (0.56%). Disturbances on a subclinical level corresponding to the EDNOS category as defined in DSM-IV were seen in 19 cases (4.78%). Criteria of a disturbed attitude toward eating as defined in DSM-PC were met by another 15 girls (8.39%) [9]. Indirect conclusions regarding trends connected with attitude toward eating and the body may be drawn on the basis of anthropological studies that have been conducted on the population of Poland and Kraków for many years. In the last 20 years, an evident tendency to slim down has become noticeable among Kraków girls, mostly pre-school and adolescent, and among pre-school boys [1]. Some worrying signs have been noted, including: an increase in the number of overweight and obese boys, with a simultaneous tendency to a more central distribution of fat, and a remarkable decrease in the average level of body fat deposition in the oldest girls, and an increase in the number of girls with body mass deficit and too low body fat deposition level [5]. However, the limited quantity of data means that the issue of whether at all there has been an increase in occurrence of eating disorders, and if so, what the level of this increase is in Poland, is unresolved. Thus, studies analysing data from medical registers from previous years are very important. They allow us to better assess the hypothesis of an increase in the phenomenon, as well as to make an attempt to describe the

dynamics of the phenomenon and its accompanying features.

Answering the question about the increase in frequency of occurrence of eating disorders in Poland after the transformation of 1989 is scientifically extremely important. Findings relating to this issue could be a starting point for further research on socio-cultural aspects which may be significant in the development of anorexia and bulimia nervosa.

## MATERIAL AND METHOD

In the study, reasons for first time consultation attendance by girls aged 12 – 21 at the Outpatient Unit of the Department of Child and Adolescent Psychiatry in Kraków in 1988, 1996, 2000 and 2004 were analysed.

Additionally, the dynamic of changes in consultations frequency in relation to such variables as: age, type of place of residence (village/city), living in Kraków/outside Kraków, population of the place of residence were analysed. The study was based on diagnoses and data from the outpatient records of 788 patients.

The diagnoses were made with reference to the following categories:

- Eating disorders – ED
- Schizophrenia and schizoaffective disorders – PD
- Mood disorders, juvenile depression, depressive reaction to stress, adolescent crisis - AD
- Conduct disorders, attention-deficit/hyperkinetic disorders, mixed disorders of conduct and emotions – CA

Disorders connected with mental retardation (disability + diagnoses where disability is also observed) – MR

- Anxiety disorders, school phobia, anxiety-depressive disorders – AX
- Disorders resulting from organic changes – OD

Substance-Related Disorders – PA

Observation of mental condition not completed with diagnosis – OBS

- Other – tics, learning disorders, selective mutism, pervasive developmental disorders, sleep disorders – OTH

## Statistical procedures

Chi-square test for folder contingency tables, single-factor variation analysis and post hoc Tamhane and Sheffe tests for comparison among averages were used in the study.

## RESULTS

The distribution of diagnoses in individual groups is presented in Tab. 1 and 2 shows the distribution within the eating disorders group. The frequency of first time consultations due to eating disorders increased in absolute numbers from 5 in 1988 to 90 in 2004. This constitutes the largest increase both in absolute numbers and as a percentage.

An increase was observed for both anorexia nervosa and bulimia nervosa. However, bulimia nervosa and atypical bulimia nervosa were not recognized and diagnosed in the first two years covered by the study. The number of patients attending consultations was rather low, too. A similar increase, in absolute numbers, was observed in the AD group, which constitutes an umbrella category for a significant number of cases of patients suffering from broadly understood affective disorders.

77% of all patients came from cities, including 46.4% from Kraków. Girls from the AD group turned out to come from cities with a larger population than girls from the ED group ( $p < 0.05$ ). Mean registration age in the eating disorders group, regardless of the year of registration, was 16.5 (SD 1.63). It turned out to statistically differ from the mean registration age of girls with other diagnoses. When analysing only eating disorders, there was no statistically significant relationship among studied variables in the context of the year of registration.

Tab. 1, 2 (next page)

## DISCUSSION

In 1989 and in the first half of the 1990's, the outpatient unit of the Department of Child and Adolescent Psychiatry in Kraków was one of only a few clinical centres located in two large regions of southern Poland (these regions are now called the Małopolskie and Podkarpack-

**Table 1.** Size of the individual diagnostic groups

Year	DGN										Total
	OTH	OD	PA	PD	AX	AD	ED (F50)	MR	CA	OBS	
1988	1	6	2	6	15	38	5	2	3	1	79
	1.3%	7.6%	2.5%	7.6%	19.0%	48.1%	6.3%	2.5%	3.8%	1.3%	100.0%
1992	1	6	1	10	20	24	15	1	17	1	96
	1.0%	6.3%	1.0%	10.4%	20.8%	25.0%	15.6%	1.0%	17.7%	1.0%	100.0%
1996	2	12	2	11	18	23	37	3	21	7	136
	1.5%	8.8%	1.5%	8.1%	13.2%	16.9%	27.2%	2.2%	15.4%	5.1%	100.0%
2000	1	1	1	15	12	50	60	7	16	8	171
	.6%	.6%	.6%	8.8%	7.0%	29.2%	35.1%	4.1%	9.4%	4.7%	100.0%
2004	2	4	0	11	39	89	90	6	33	32	306
	.7%	1.3%	.0%	3.6%	12.7%	29.1%	29.4%	2.0%	10.8%	10.5%	100.0%

**Table 2.** Diagnosis in ED group according to ICD X

Year	Diagnosis type					
	eating disorders	anorexia nervosa	atypical anorexia nervosa	bulimia nervosa	atypical bulimia nervosa	others eating disorders
1988	0	5	0	0	0	0
	.0%	6.3%	.0%	.0%	.0%	.0%
1992	2	12	1	0	0	0
	2.1%	12.5%	1.0%	.0%	.0%	.0%
1996	3	29	0	4	1	0
	2.2%	21.3%	.0%	2.9%	.7%	.0%
2000	0	39	6	13	2	0
	.0%	22.8%	3.5%	7.6%	1.2%	.0%
2004	0	57	9	19	4	1
	.0%	18.6%	2.9%	6.2%	1.3%	.3%

ie Voivodeships) where young girls diagnosed with eating disorders attended consultations.

Until 2007, the department had only one 20-bed psychiatric ward for adolescent patients living in both Voivodeships. It is worth noting that the number of consultations at the outpatient unit is currently limited not by needs, but by staff availability. The waiting period for a consultation is currently 2 to 3 months. On average, up to 30% of patients give up their place on the waiting list for a consultation, instead seeking medical care in the private sector. Until 1996 consultations took place without the need for any waiting period. It can be assumed that in

1989 and the following few years our department was the only clinical centre in the region accepting "difficult patients" - as patients with eating disorders were then considered. There was also no broad network of private medical facilities and private practices. Nowadays, a number of patients with eating disorders do not come to the department, instead finding help in numerous private psychiatric and therapeutic centres.

The study is burdened with a number of methodological imperfections and uncertainties, making it difficult to draw conclusions. Diagnoses of eating disorders made at the department, especially in previous years, have not always been based on objective diagnostic criteria, but rather on the experiences of department doctors.

Some of the diagnoses - in the light of current unequivocal diagnostic criteria - could be classified as subclinical or atypical. Changes in diagnostic criteria during the analysed period should also be noted. The manner in which disorders were assigned to particular clinical groups may also be called into question. However, this objection least concerns the group of girls with eating disorders.

The increase in the frequency of first-time consultations in the 90's and the beginning of the 21<sup>st</sup> century could have been partially affected by the demographic situation. Although demographic changes in Poland have resulted in a

sharp drop in the number of children and adolescents aged up to 17, in the years 1988 – 2002 an increase in the number of adolescents between 15 – 19 years old (from 2 714 thousand to 3 282 thousand) was reported. This is the effect of the baby boom in the first half of the 1980's.<sup>1</sup> Analysis in terms of Voivodeship from which patients came can also pose some difficulties – changes in voievodeship borders may have resulted in changes of medical centres to which patients have been referred. However, these uncertainties are smaller when analysing the city of Kraków ; according to Central Statistical Office (GUS) data, in 1988, the population of girls between ages 13 – 18 in Kraków was 29 887, in 2004 it was 25 729.<sup>2</sup> Demographic factors may explain a part of the increase in the quantity of all consultations, but not the significant growth in the quantity of consultations concerning specific clinical cases.

The findings of a study do not allow us to exclude the hypothesis, appearing in the literature on the subject matter, that the phenomenon is not occurring more often but is simply diagnosed more frequently [3]. Similarly, the issue of whether we are dealing not so much with the occurrence of new cases of disorders as with their accumulation due to the chronicity of the condition is worth considering. Patients could have been directed to the department after a period of treatment in other medical centres. There was no data regarding the length of the period of occurrence of symptoms before coming to the department or regarding previous treatment in the analysed material. The average age of patients did not differ in the analysed time-brackets, which may suggest a similar time period between developing the condition and the first visit to the department's outpatient unit. Furthermore, the fact that a group of specialists in the field of family therapy for eating disorders was formed in the department is not without significance – its establishment may have led to frequent referral of patients with eating disorders to our medical centre.

Both occurrence and increase in frequency of eating disorders turned out not to be related in

<sup>1</sup> GUS (Central Statistical Office) data.

<sup>2</sup> Annual Statistic Report for the Kraków Region, Regional Statistical Office, Kraków 1989, 1991, 1993, 2000, 2004.

a statistically significant way with the majority of the analysed variables. Significance of this observation is limited by lack of such a data as type of the school, parents education and social class. This result confirms the observations of epidemiological studies that in the developmental period eating disorders do not correlate in Poland with objective socio-demographic variables [9, 11]. The opinion that eating disorders are determined by the process of "westernisation" would suggest more frequent occurrence of disorders in big cities undergoing fast cultural changes. In this context, an interesting observation – though one that is hard to interpret - is that girls from the ED group statistically significantly more often than girls from the AD group came from cities with smaller populations. This observation may be linked with the greater cost of social changes in smaller traditional communities – which results in more frequent occurrence of eating disorders in these populations. Depressive symptoms, especially less intensive ones, may engender less anxiety in parents than eating disorders – which may result in rarer seeking of help in distant clinical centres.

## CONCLUSIONS

The obtained results may thus constitute a significant argument supporting the hypothesis of an increase in eating disorders in the population of young girls in Poland. However, their fragmentary character and a number of methodological uncertainties do not allow us to unequivocally draw a categorical conclusion and estimate the frequency of disorders occurrence in the population. Further researches in other clinical centres confirming or contradicting observed trends are recommended.

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