

Marital Status in Morbidly Obese Patients After Bariatric Surgery

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Abstract

Objective: The present study analyzes marital status in a group of morbidly obese patients who have undergone gastric reduction surgery, and evaluates whether the existence or absence of psychiatric comorbidity marks significant differences in their marital adjustment.

Methods: The study sample included 85 morbidly obese patients (71 female, 14 male) who had received surgical treatment (vertical banded gastroplasty) for weight reduction. Twenty-five of these patients (29.41%) met ICD-10 criteria for the diagnosis of psychiatric disorders and they were included in the "Psychiatric Obese Group". The other sixty patients (70.58%) did not show ICD-10 diagnostic criteria and they were included in the "Non-Psychiatric Obese Group". Each patient completed the Enriching & Nurturing Relationship Issues, Communication & Happiness (ENRICH).

Results: Morbidly obese patients had poorer marital satisfaction ($p < 0.0001$), personality issues ($p < 0.003$), children and marriage relationships ($p < 0.0001$), family and friends relationships ($p < 0.0001$), and equalitarian roles ($p < 0.0001$) than the community sample. Significant differences were found between the two groups (psychiatric and non-psychiatric obese group) in marital satisfaction ($p < 0.0001$), personality issues ($p < 0.0001$), communication ($p < 0.0001$), conflict resolution ($p < 0.0001$), financial management ($p < 0.003$), sexual relations ($p < 0.0001$), children and marriage ($p < 0.001$), family and friends ($p < 0.0001$), equalitarian roles ($p < 0.005$), and religious orientation ($p < 0.0001$).

Conclusions: Our results are in agreement with the studies that have reported a high degree of marital instability in morbidly obese patients when psychiatric comorbidity appears (German J Psychiatry 2004; 7 (3) 22-27).

Keywords: bariatric surgery, morbid obesity, marital status, psychiatric disorders, family relations

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Introduction

The partner relationship is of great importance to the morbidly obese patient undergoing gastric surgery for weight reduction. It has been reported that an appropriate social and family environment and partner relationship are necessary to ensure good results from surgical treatment and the postoperative period (Charles, 1987; Hafner, 1990). Some centres have even suggested that the lack of such

social support is sufficient reason to make surgery inadvisable (Getler, 1986).

A number of authors have described cases in which a high level of marital instability has improved in patients with morbid obesity following surgery (marital and sexual relations) (Hutzler, 1981; Rand, 1982; Guisado, 2001), although others have noted a worsening in this respect after surgical treatment (Crisp, 1977; Marshall, 1977; Espmark, 1980). Included in this second group is a study by Hafner et al. (Hafner, 1987) who found high marital instability rates in

patients with later obesity onset undergoing surgical treatment. This author (Hafner, 1990) described an increase in family problems following surgery, and raised the question of the importance of family support for the patient undergoing weight-reduction treatment.

Some authors have argued that marital instability in these patients is due to the fact that they suffer from so much mental illness, and in this way, a chaotic home life may be at the root of the self-defeating attitudes that obese persons often have about themselves (Bruch, 1973; Price, 1987).

The present study analyzes marital status in a group of morbidly obese patients who have undergone gastric reduction surgery, and evaluates whether the existence or absence of psychiatric comorbidity marks significant differences in their marital adjustment.

Methods

Patients

The study sample included 85 morbidly obese patients (71 female, 14 male) who had received surgical treatment (vertical banded gastroplasty) for weight reduction. Twenty-five of these patients (29.4%) met ICD-10 criteria for the diagnosis of psychiatric disorders and they were included in the "Psychiatric Obese Group". The other sixty patients (70.6%) did not show ICD-10 diagnostic criteria and they were included in the "Non-Psychiatric Obese Group". The patients were diagnosed by three psychiatrists and an endocrinologist in the Obesity Unit of the San Carlos University Hospital of Madrid.

The International Classification of Mental and Behavioural Disorders (ICD-10) is an instrument for clinical diagnosis and joint diagnostic criteria for research, developed and published by the WHO (WHO, 1992).

We evaluated the patients 18 months after surgery based on our experience in the Obesity Unit. At that point, most of the patients had adapted to new eating habits, the psychological distress resulting from obesity had decreased, and any surgical complications that had arisen were resolved. This point is supported by others studies that have show a decrease in psychopathological status and personality disturbances one year after surgery in morbidly obese patients (Charles, 1987; Guisado, 2001).

Assessment

Each patient completed the Enriching & Nurturing Relationship Issues, Communication & Happiness (ENRICH) (Olson, 1992).

The authors requested permission from Dr. David H. Olson to use this test, and we received permission to publish the paper from the "Research Life Innovation Center, Inc" (19 December 2001). It is a standard instrument used to examine

problem areas in couple relationships. The ENRICH contains 115 items (rated on a 5-point scale of agreement ranging from strong disagreement to strong agreement) and 11 categories: Marital Satisfaction, Personality Issues, Communication, Conflict Resolution, Financial Management, Leisure Activities, Sexual Relationships, Children and Marriage, Family and Friends, Equalitarian Roles, and Religious Orientation.

The internal consistency for ENRICH was based on 672 couples: 1344 individuals. The α reliabilities for all the scales averaged 0.74, and the only scale with low reliability was the Sexual Relationship category, which was 0.48. Test-retest reliability was assessed over a four-week period with 115 married individuals. The average reliability was 0.87 with a range from 0.77 to 0.92 over all categories (Olson, 1983a,b).

Our results are limited by not having been able to analyze these patients' marital status before surgery or to identify the origin of the psychiatric pathology.

Statistical Analysis

Statistical analysis of the instrument was performed with Student's t-test for independent samples to test for differences between the morbidly obese patients/community people, and the psychiatric obese group/non-psychiatric obese group. The level of significance after Bonferroni adjustment was $p < 0.005$.

The Pearson correlation coefficient (stepwise) yielded statistically significant results between the socio-economic level and the marital status.

Results

The mean age of the group with psychiatric disorders was 43.8 ± 11.3 years, with a sex distribution of 5 men (5.9 %) and 20 women (23.5 %). The mean age of the group without psychiatric disorders was 42.0 ± 11.5 years, with 9 men (10.6 %) and 51 women (60.0 %). Sixty-three percent were married, 30% were single and 7% separated or divorced (with no significant differences between two groups). Seventy-two percent had a partner relationship, and of these 31% had conflicts (mainly in the psychiatric obese group, 80%), with significant differences between the groups ($X = 26.705$; $p < 0.0001$). The number of family members living at home was 2.7 ± 1.4 and the average number of children was 1.3 ± 1.3 .

The total monthly income per family of these patients was 1630 + 391 euros. The monthly amount of money which each patient had at his or her disposal for personal or domestic expenditure was 1084 + 460 euros. No significant differences were found between total income and the amount each patient had at his or her disposal, regardless of the existence of psychiatric pathology. The total monthly income per family was related to the subscale Family and Friends ($r = 0.39$, $t = 3.44$, $p < 0.001$), and Children and Mar-

riage ($r = 0.27$, $t = 2.34$, $p < 0.01$). The monthly amount of money that each patient had at his or her disposal was related to the subscale Children and Marriage ($r = 0.35$, $t = 3.03$, $p < 0.004$). The money at the patient's disposal was related positively to the total amount of money of the family group ($r = 0.57$, $t = 6.859$, $p < 0.0001$).

Table 1 shows the items related to marital status in all patients, in the psychiatric obese group and the non-psychiatric obese group, respectively.

Discussion

In recent years, several studies conducted on families of patients with morbid obesity have suggested that family anomalous eating habits, parental conflicts and parents' psychopathology may influence the course of the weight problem (Géral, 1994; Favaro, 1995; van Lieshout, 1998; Schiattino, 1998; Hood, 2000). Some dysfunctional patterns in these families leading to overeating have been identified, including regressive coping styles such as stress eating (Maddi, 1997), sexual problems, lack of self-esteem, unsatisfactory relationships, and stigmatization of the obese individual (Kinzl, 2001; Andrews, 1997).

In the present study, 63% of the patients were married and this is consistent with reports from other studies on gastric restrictive surgery, where the proportion of married patients varies from 54-78% (Halmi, 1980; Hall, 1983; Gentry, 1984; Rand, 1986; Valley, 1987; Larsen, 1990). At the time of the first psychiatric postoperative interview, 72% were living in a stable cohabitant relationship, and the relationship with their spouse/partner was rated as "good" by 69% and "bad" by 31%. This is different from other studies where the proportion of bad relationships was lower (Hutzler, 1981; Larsen, 1990).

In our sample, we found significant differences referring to marital status, depending on whether or not psychiatric pathology had been detected. The group with a psychiatric diagnosis had lower scores in all the subscales of the ENRICH, except in leisure activities, where there were no significant differences between the groups. Based on these data, we find that 80% of the patients with bad partner relationships had been diagnosed with psychiatric pathology, with highly significant differences; this finding would seem to concur with those studies that have reported family problems associated to psychiatric disorders (Bruch, 1973; Price, 1987; Favaro, 1995; van Lieshout, 1998; Hood, 2000; Kinzl, 2001).

If we compare our data from the whole sample with the reference values, with which the test was conducted, we can see that the patients with morbid obesity showed on the whole lower couple satisfaction. Also, the patients had lower scores in marital status, personality issues, children and marriage relations, family and friends relations, and equalitarian roles. This seems to be in agreement with those studies that report instability within the morbidly obese patients' family environment (Hutzler, 1981; Rand, 1982; Bruch, 1973; Price, 1987; Black, 1992).

Our results agree with the studies that have noted a high degree of marital instability in morbidly obese patients (Hutzler, 1981; Rand, 1982) when psychiatric comorbidity appears. The interesting aspect of this finding is the fact that patients with maladjustment seem to have greater difficulty in reducing their weight after surgery (Hafner, 1990). This would seem to support the argument of those studies which conclude that the families of obese individuals (not necessarily morbidly obese individuals) are emotionally disturbed (Bruch, 1973; Price, 1987; Black, 1992).

Despite the fact that we observed an improvement in partner relationships as our patients reduced weight (Guisado, 2001), some marital dysfunctions are seen to exist if the reference values are compared, a situation which is further aggravated by the existence of psychiatric pathology.

The socioeconomic level of our patients has an influence on partner relations, in the sense that the financial means of the family are positively associated with interpersonal relations with friends, and the decision to have children and form relationships with them. Also the money which they have at their disposal for their usual expenses is positively associated with the family group's monthly income, and therefore could well be an aggravating element within the marital situation. Despite the fact that the presence or absence of psychiatric pathology did not reveal significant differences, the patients with psychiatric pathology reported distress with regard to domestic financial affairs, between the total family income and the amounts patients had at their disposal (low scores in financial management subscale), which would seem to support the notion that psychological discomfort has a deteriorating effect on partner relationships.

The clinical implications of our study indicate the importance of a psychiatric evaluation before and after gastric surgery for weight reduction, since we found a poorer marital status in the group suffering from psychiatric pathology than in the normal obese group. We think that the evaluation and detection of psychiatric pathology previous to surgery would improve the marital adjustment and prognosis of these patients. Future studies on patients with morbid obesity, therefore, should consider the existence of psychopathology as a variable, since failure to do so may jeopardise the reliability of the results. Further research should analyze whether the detection of psychiatric comorbidity and subsequent treatment prior to surgery would change the prognosis in this population.

Table 1. Marital Status in Morbidly Obese Patients

Items from the ENRICH	Value to test*	Total sample (n=85)				Non-Psychiatric Obese Group (n=60)				Psychiatric Obese Group (n=25)			
		Mean	SD	t	p**	Mean	SD	t	p**	Mean	SD	t	p**
Marital satisfaction	37.31	31.39	8.71	-4.399	.000	34.48	7.59	-1.814	NS	28.42	8.20	-5.356	.000
Personality issues	34.58	29.76	10.02	-3.161	.003	33.69	8.94	-.446	NS	25.77	8.10	-5.451	.000
Communication	34.90	31.63	9.75	-1.718	NS	35.97	8.53	1.178	NS	27.50	8.10	-4.154	.000
Conflict resolution	34.05	30.28	9.50	-2.545	NS	34.66	7.65	.566	NS	26.04	8.59	-4.639	.000
Financial management	37.16	34.50	9.07	-2.355	NS	36.86	8.28	-.512	NS	32.15	8.61	-3.255	.003
Leisure activities	33.99	32.73	7.62	-1.843	NS	34.79	7.36	-.012	NS	31.12	7.00	-2.689	NS
Sexual relationship	37.09	34.35	8.22	-2.683	NS	36.83	8.09	-.514	NS	31.42	7.47	-4.214	.000
Children and marriage	38.35	31.69	10.41	-4.271	.000	32.79	11.42	-2.574	NS	29.77	12.08	-3.579	.001
Family and friends	37.52	31.35	7.65	-6.384	.000	33.59	7.85	-3.406	.002	30.07	6.63	-6.514	.000
Equalitarian roles	39.04	34.96	6.47	-4.280	.000	34.97	6.07	-2.864	NS	35.04	6.17	-3.139	.005
Religious orientation	28.86	27.78	5.73	-1.275	NS	28.31	5.35	-.397	NS	28.03	6.57	-9.315	.000

* From Olson, Fournier & Druckman (1982)

** Level significance after Bonferroni adjustment $p < .005$

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