COMMON MENTAL DISORDERS AND OBESITY IN BRAZILIAN WOMEN

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BACKGROUND

- The obesity is a multifactorial disease that causes significant morbidity and mortality.
- Considering that, the obesity is more prevalent in women than men, this group are more at risk for the effects of obesity and should be given more attention.
- Common mental disorders are a set of psychiatric symptoms that includes irritability, fatigue, insomnia, difficult concentration, memory deficit, physical complaints and anxiety and depression symptoms.
- The presence of psychiatric disorders may be an important factor for the development of obesity in women.

OBJECTIVES

- This study aimed investigate the association between common mental disorders (CMD) and obesity among Brazilian women.

MATERIALS AND METHODS

- A cross-sectional population-based study was conducted in São Leopoldo, Southern Brazil;
- A representative sample of 1,122 adult women aged between 20 and 69 years was investigated;
- Common mental disorders (CMD) were assessed using the Self-Reporting Questionnaire (SRQ-20);
- We used a cutoff level of at least 7 out of 20 items;
- The nutritional status was assessed by measuring the body mass index (BMI; in kg/m²);
- Obesity was determined by BMI>30kg/m²;
- Unadjusted and adjusted prevalence ratios (PR) were obtained by Poisson regression;
- A multivariate regression was conducted using a robust estimation approach.

RESULTS

- The mean age of the sample was 43.4 ± 13.4 years;
- The overall prevalence of obesity was **32.9%** (95% confidence interval [CI]: 30.1-35.6);
- **33.2%** (95%CI: 30.4-35.9) was categorized as having CMD;
- After adjusting for confounding factors, there was a statistically positive relationship between the presence of CMD with the occurrence of obesity;
- The prevalence ratio for obesity was **1.20 (95%CI: 1.01-1.42)** in women with CMD, when compared with those without CMD.

CONCLUSIONS

- The findings of this study indicate that common mental disorders have an independent association with obesity among adult women.
- Furthermore, the high prevalence of obesity and psychiatric disorders in women suggests that the implementation of preventive healthcare programs should be a priority.

Table 1. Sample characteristics and the prevalence of obesity (BMI>30kg/m²) and common mental disorders (CMD) among adult women in south of Brazil. (N=1122).

Characteristics	n (%)	Obesity	p-value	CMD	p-value
		n (%)		n (%)	
Age (years)			<0.001 ^b		0.957 ^b
20 to 29	216 (19.3)	44 (20.4)		66 (30.6)	
30 to 39	242 (21.6)	78 (32.2)		85 (35.1)	
40 to 49	274 (24.4)	89 (32.5)		94 (34.3)	
50 to 59	227 (20.2)	86 (37.9)		76 (33.5)	
60 to 69	163 (14.5)	72 (44.2)		51 (31.3)	
Marital status			0.011 ^a		0.767 ^a
Single	227 (20.2)	58 (25.6)		72 (31.7)	
Married	715 (63.7)	239 (33.4)		235 (32.9)	
Separated/divorced	109 (9.7)	40 (36.7)		38 (34.9)	
Widowed	71 (6.3)	32 (45.1)		27 (38.0)	
Schooling (years of school) (N=1120)			<0.001 ^b		<0.001 ^b
≥ 15	108 (9.6)	21 (19.4)		14 (12.9)	
11 to 14	358 (31.9)	99 (27.7)		102 (28.5)	
8 to 10	199 (17.8)	68 (34.2)		76 (38.2)	
5 to 7	252 (22.5)	97 (38.5)		85 (33.7)	
≤ 4	203 (18.1)	83 (40.9)		95 (46.8)	
Economic class (ABEP scale) (N=1116)			0.043 ^b		<0.001 ^b
A (high)	43 (3.9)	12 (27.9)		5 (11.6)	
B	345 (30.9)	94 (27.3)		84 (24.4)	
C	592 (53.1)	216 (36.5)		222 (37.5)	
D +E (low)	136 (12.2)	44 (32.4)		61 (44.9)	
Physical activity			0.001 ^a		<0.001 ^a
Active	161 (14.4)	35 (21.7)		28 (17.4)	
Inactive	961 (85.6)	334 (34.8)		344 (35.8)	
Smoking status			0.389 ^a		<0.001 ^a
Nonsmoker	657 (58.6)	215 (32.7)		189 (28.8)	
Former smoker	257 (22.9)	92 (35.8)		84 (32.7)	
Smoker	208 (18.5)	62 (29.8)		99 (47.6)	

^a P-values for chi-square test for heterogeneity of proportions (categorical variables)

^b P-values for chi-square test for linear trend (ordinal variables).

The common mental disorders were assessed by the Self-Reporting Questionnaire (SRQ-20), using a cutoff level of at least 7 out of 20 items.

ABEP: Brazilian Association of Research Companies - Economic Classification Criterion.

Table 2. Unadjusted and adjusted prevalence ratios (PR) for the association between common mental disorders (CMD) and obesity among adult women in south of Brazil. (N=1122).

CMD	Obesity n (%)	Unadjusted	Multivariable-adjusted ^a
		PR (95% CI)	
		P=0.016	P=0.044
Absence	229 (30.5)	1.00 (Reference)	1.00 (Reference)
Presence	140 (37.6)	1.23 (1.04, 1.46)	1.20 (1.01, 1.42)

^a Adjusted for age, marital status, schooling, economic class, physical activity, and smoking status.

P-values: Wald test obtained by Poisson regression.

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