

# Unemployment and Quality of Life

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## Abstract

**Unemployment, but not comorbidity is associated with impaired quality of life in morbid obesity.**

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**Introduction:** We aimed to assess whether unemployment is associated with impaired health related quality of life (HRQOL) among morbidly obese patients.

**Methods:** A total of 146 morbidly obese patients completed the Medical Outcome Study 36 – Item Short Form Health Survey (SF-36; Physical and Mental Component Scale), the Obesity and Weight-loss Quality of life (OWLQOL) and the Weight Related Symptoms Measurement (WRSYM) questionnaires. Multiple linear regression analyses included gender, age, occupational status, education, anxiety/depression, arthralgia, type 2 diabetes, hypertension, obstructive sleep apnea and BMI as independents, and the various measures of HRQOL as dependents

**Results:** Mean (SD) age, BMI and waist-hip ratio (WHR) were 43 (11) years, 45 (6) kg/m<sup>2</sup> and 0.98 (0.09), respectively, and 72% were females. Forty-seven percent of the patients were unemployed, 22% had higher education (> 12 years), 42% had a history of anxiety or depression, 66% arthralgia, 38% hypertension, 29% obstructive sleep apnea and 28% had type 2 diabetes.

Multiple linear regression revealed that unemployment was a strong independent predictor of impaired physical and mental functioning (SF-36). In contrast, female gender and anxiety/depression, but not unemployment, were independently associated with poor obesity specific QOL.

Unemployment explained most of the variation in the physical (19%) and mental scales (10%) used in the study, whereas gender explained 23% of the variation in the obesity specific QOL-scale.

**Conclusion:** Unemployment is associated with impaired HRQOL, but not with poor obesity-specific QOL, in morbidly obese subjects.

**Conflict of interest:** None disclosed.

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## Objectives

We aimed to investigate whether unemployment is associated with impaired health related quality of life (HRQOL) among morbidly obese patients.

We also explored the impact of gender, anthropometric measures, type 2 diabetes, hypertension, obstructive pulmonary disease, obstructive sleep apnea (OSA), arthralgia and anxiety/depression upon HRQOL.

## Material and methods

A total of 146 morbidly obese patients from the MOBIL study completed the Medical Outcome Study 36 – Item Short Form Health Survey (SF-36; Physical and Mental Component Scale) and the Obesity and Weight-loss Quality of life (OWLQOL).

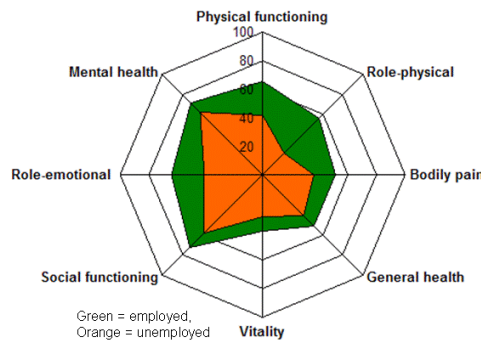
Mean (SD) age, BMI and waist-hip ratio (WHR) were 43 (11) years, 45 (6) kg/m<sup>2</sup> and 0.98 (0.09), respectively, and 72% were females.

Forty-seven percent of the patients were unemployed, 22% had higher education (>12 years), 42% had a history of anxiety or depression, 66% arthralgia, 38% hypertension, 20% pulmonary obstructive disease, 29% obstructive sleep apnea and 28% had type 2 diabetes.

Multiple linear regression analyses included occupational and marital status, education, gender, age, anxiety/-depression, arthralgia, type 2 diabetes, hypertension, obstructive sleep apnea, BMI and WHR as independents, and the two measures of HRQOL as dependents.

## Results

To explore possible differences within the various subscales of SF-36, we arranged the patients in two groups: employed and unemployed (Figure).



The employed patients reported significantly higher HRQOL within all subscales.

**Table 1. Multiple linear regression analyses, selected variables**

	SF-36 Physical dimension		SF-36 Mental dimension		OWLQOL	
	R <sup>2</sup> =0.52		R <sup>2</sup> =0.35		R <sup>2</sup> =0.32	
	Beta	Sign.	Beta	Sign.	Beta	Sign.
<b>Gender</b>	0.133	0.258	-0.123	0.369	<b>0.458</b>	<b>&lt;0.001</b>
<b>WHR</b>	0.062	0.619	0.394	<b>0.007</b>	0.061	0.663
<b>Unemployed</b>	<b>-0.478</b>	<b>&lt;0.001</b>	-0.275	<b>0.007</b>	0.044	0.641
<b>Obstructive pulmonary disease</b>	-0.270	<b>0.004</b>	0.166	0.118	0.017	0.864
<b>Anxiety/depression</b>	0.094	0.284	-0.295	<b>0.004</b>	0.160	0.094

Score 0-100. Higher is better.

Multiple linear regression analysis revealed that unemployment was a strong independent predictor of impaired physical and mental functioning (SF-36).

In contrast, female gender, but not unemployment, were independently associated with lower obesity specific QOL (OWLQOL).

Unemployment explained most of the variation in the physical (19%) and mental scales (10%) used in the study, whereas gender explained 23% of the variation in the obesity specific (emotional) QOL-scale.

As shown in table 1, highly significant associations were observed between unemployment and HRQOL measured by the SF-36.

## Conclusions

Unemployment is associated with impaired HRQOL, but not with obesity specific QOL, in morbidly obese subjects.