Personal factors associated with health related quality of life in patients attending patient education courses while waiting for bariatric surgery

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NORWAY

Introduction

In Norway, patients on waiting lists for treatment of their morbid obesity are required to attend a comprehensive patient education course at a Patient Education Resource Center. The aims of this study was 1) to explore the relationship between socio-demographic variables, health behaviour (physical activity), social support, and personal factors (self-esteem, self-efficacy, sense of coherence and coping style) in relation to physical and mental health at the beginning of the course, and; 2)to compare participants' HRQoL scores with norms from the general polulation.

Materials and methods

Data were collected in a cross-sectional correlation design by self-reported questionnaires. Setting: Day 1 or 2 in health promotion educational courses in Norway. Subjects: Out of the 185 patients who attended the courses, 142 (76.8%) volunteered to participate and 128 had valid responses on all items. Mean age was 42.4 years (SD=10.4) and 90 of the participants (70.3%) were women.

Measures: SF-12v2 . Self-Esteem Scale (RSES – 4 item version), Sense of Coherence (SOC-13), Self efficacy (GSE), Coping style (BACQ), social support, and regular physical activity.

Statistical analysis

Descriptive, correlational and multivariate linear regression analysis.

Results

The obese scored lower on all the HRQoL sub-domains compared with norms. Lower age, having a paid job, being physical active was related to the participants' physical health. Multivariate analyses showed that personal factors explained 3.6% of the variance in physical health and 41.6% in the mental health.

Table 1
Health behavior, environmental, and personal factors among men and women (N=128).

Variable groups	Scales	Men (n =38) M (SD)	Women (n = 90) M (SD)	p	Effect Size d
Health behavior					
Physical activity	0-4	1.2 (1.0)	1.3 (1.0)	0.32	0.10
Environmental characteristics					
Social support	1-5	2.2 (0.9)	2.0 (1.0)	0.28	0.21
Personal factors					
Self-Esteem (RSES-4) (high scores=lower Self-Esteem)	4-16	10.7 (2.5)	10.2 (2.7)	0.28	0.19
Self-Efficacy (GSE)	1-40	27.2 (6.1)	26.3 (6.3)	0.43	0.15
Sense of Coherence (SOC)	13-91	56.4 (11.4)	52.2 (11.3)	0.05	0.37
Coping style (BACQ)	12-60	38.1 (6.4)	38.1 (5.9)	0.98	0.00

Data are study mean values, (±SD), p-values of test of differences between men and women by t-tests and the effect size of the differences by Cohen's d.

Conclusions

The finding that personal factors account for 41.6% of the variance of the MCS in contrast with 3.6% of the variance in the PCS enhance our understanding of the dynamics of quality of life among obese persons. These findings indicate that self-esteem, sense of coherence and coping style are important factors related to HRQoL in obese men and women seeking treatment for morbid obesity. Recognizing this influence of personal factors in HRQoL may enrich clinical research and may be crucial when designing interventions aimed at treatment effectiveness, including educational courses. Further research is needed to examine what other personal factors contribute to quality of life. Long-term data are also needed to study possible changes in personal factors and HRQoL in this population.

Figure 1.
Norm-Based Scoring of SF-12 Profile for the participants with obesity (Mean scores, SD and 95%CI, n=128)Scores from the general population in the US 1998 used as norms (mean score =50, SD=10)

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