Determinants of Quality of Life in Thai Obese Patients

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Background: Health-related quality of life (HRQoL) is one of the most important aspects of health. HRQoL has been shown to be impaired in obese patients living in various countries; however, data from Thailand remains limited.

Objective: This study aimed to describe HRQoL and its predictors among Thai obese patients.

Methods: Obese patients (BMI>23 kg/m2, aged >18 years) were enrolled from the outpatient clinic of an academic medical center in Bangkok, Thailand during 2015-2017. Demographic data, anthropometric data, and medical history were carefully collected. HRQoL was evaluated using Thai versions of 1) the World Health Organization Quality of Life (WHOQOL-BREF) and 2) EQ-5D-5L, which also included a utility score and a visual analogue scale (VAS).

Results: A total of 125 subjects were enrolled (aged 41.7±12.7 years, 65.6% female, BMI 36.9±7.8 kg/m2). Patients were stratified into 4 groups: 1) BMI<30 kg/m2 (n=20, 16%; mean BMI 27.8±1.6 kg/m2); 2) BMI 30-35 kg/m2 (n=43, 34.4%; mean BMI 32.6±1.4 kg/m2); 3) BMI 35-40 kg/m2 (n=22, 17.6%; mean BMI 36.6±1.4 kg/m2); and 4) BMI >40 kg/m2 (n =40, 32%; mean BMI 46.4±6.0 kg/m2). EQ-5D-5L VAS scores were significantly lower in patients with higher BMI (0.77±0.17 vs 0.73±0.13 vs 0.71±0.17 vs 0.59±0.21 respectively, p<0.001), with all groups reporting lower scores compared with national average (0.794). Also, significantly more patients in higher BMI groups reported severe or very severe problems in EQ-5D-5L anxiety/depression domain (0% vs. 2.3% vs. 4.5% vs 5% respectively, p=0.015). The total WHOQOL-BREF score did not differ significantly among the different BMI groups (92.9±14.9 vs 90.8±9.4 vs 90.6±14.2 vs 87.1±13.4 respectively, p=0.426), as well as EQ-5D-5L utility score (0.84±0.16 vs 0.87±0.11 vs 0.86±0.14 vs 0.81±0.18 respectively, p=0.323). Multivariate analyses revealed that BMI was the only independent predictor of EQ-5D-5L VAS scores (β coefficient -0.65, 95%CI -1.053, -0.242; p=0.002), while having received ≥12 years of education was the only independent predictor of total WHOQOL-BREF scores (β coefficient 7.57, 95%CI 2.22, 12.92; p=0.006).

Conclusion: Among Thai obese patients, BMI has a dose-dependent negative effect on HRQoL measured by EQ-5D VAS scores and anxiety/depression domain, while education is the only independent predictor of WHOQOL-BREF scores. In addition to weight loss, the effects of various interventions on HRQoL should also be considered when prescribing treatment in this population.

Keywords: Health-related quality of life, Obese, Body mass index, WHOQOL-BREF, EQ-5D-5L, EQ-5D-5L Visual analog scale