

Weight Loss and Health-Related Quality of Life

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Obesity is an increasingly prevalent public health problem in the industrialized world.¹ In the United States, an estimated 25% of the adult population is obese,¹ and between 280,000 and 325,000 deaths a year are attributable to obesity, making it second only to smoking as a preventable cause of death.² Apart from the increased risk of mortality associated with excess body fat, obesity increases the risk of developing a variety of diseases such as type 2 diabetes mellitus, coronary heart disease, sleep apnea, and certain cancers.³ Although the medical consequences of obesity are, quite rightly, the central concern to both researchers and clinicians, it has increasingly become apparent that the problems associated with obesity are not restricted simply to its effect on health; obesity also has a substantial impact on a person's health-related quality of life (HRQOL). HRQOL is generally regarded as a multidimensional construct encompassing emotional, physical, and social domains, which reflect an individual's subjective evaluation and reaction to a health condition.⁴

In this issue of the journal, Samsa and colleagues⁵ report on an analysis of combined data from 4 randomized, placebo-controlled, double-blind clinical trials of sibutramine to investigate the effects of weight reduction on HRQOL, and to establish whether moderate 5% to 10% weight losses produce significant improvements on HRQOL. In analyses of 555 obese adults the researchers found a significant positive association between weight change and change on HRQOL. Specifically, with regard to the physically oriented SF-36 scales, a 5% to 10% reduction in weight was associated with roughly a 3- to 5-unit improvement on HRQOL. Moreover, on the obesity-specific impact of weight on quality of life (IWQOL), modest weight loss was associated with changes on the health, mobility, activities of daily living (ADL), and total scores. In addition, follow-up assessments indicated that, on the whole, the improvements in HRQOL were well maintained. The researchers also found evidence of a dose-response association, in that greater weight reduction was

associated with greater HRQOL improvement, regardless of whether or not the weight loss was achieved with sibutramine. Finally, consistent with previous studies,⁴ Samsa et al observed that the weight reduction appeared to produce the greatest change on physically oriented scales as opposed to the mental/social scales.

This study has several strengths. First, the analyses were derived from relatively large, randomized, controlled trials with well-characterized samples of mildly-to-moderately obese adults. Second, the weight loss intervention involved an FDA-approved anti-obesity agent. Third, each of the trials used both generic (SF-36) and obesity-specific (IWQOL) measures of HRQOL, thereby providing both a depth of coverage and sensitivity to the unique quality of life issues inherent in obesity. Fourth, the trials were well conducted and, thus, provide a strong test of the effects of weight reduction on HRQOL. Fifth, and most importantly, the study addresses an important limitation in previous studies in that the 8-, 24-, 28-, and 52-week follow-up assessment allows for the evaluation of the intermediate and long-term effects of weight loss on HRQOL.

There is a growing consensus that HRQOL provides a means for clinicians and obesity researchers to better understand the biopsychosocial impact of excess body weight. Such an understanding has the potential to influence the quality of care provided to obese patients. Discussing the results of their HRQOL assessment (eg, the SF-36) with obese patients can stimulate a conversation focusing explicitly on the impact their body weight has had on the way they live their life. Because body weight is generally gained slowly and insidiously, many

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obese patients are not aware of the impact their weight has had on important dimensions (health perceptions, energy level) until specific attention is given to them. Examining the impact of body weight gain on these dimensions will allow clinicians to personalize the potential benefits that can be conferred from weight loss in their obese patients. For example, a former patient of mine had given up playing golf as his body weight increased by over 100 kg. During our discussion of the results of his HRQOL assessment, however, he realized he had abandoned many other activities (eg, attending sporting events, mowing his lawn, taking his grandchild on day trips) that he had previously enjoyed. Thus, as a result of the HRQOL assessment we were able to identify significant milestones to prompt him to focus more acutely on his weight control efforts so he could “reclaim” his former life. Thus, these assessments can help clinicians to tailor treatments and set goals unique to the particular needs of the individual.

HRQOL assessments are also of value in helping obese patients to modify their weight loss goals. Unfortunately, I have found that many obese patients seeking weight loss have one goal and one goal only – achieving their ideal body weight. In reality, most truly obese patients will not be able to lose and maintain a substantial weight loss. However, in addition to the established benefits of modest weight loss on important physiologic parameters, Samsa and colleagues demonstrate that a weight loss of 10% to 15% reaps significant HRQOL benefits. Thus, great improvements in quality of life are possible for obese patients without reaching an ideal body weight. This knowledge may help some obese patients to redefine success beyond merely achieving a particular weight. Moreover, embracing HRQOL as an important outcome may translate into enhanced motivation to make lifestyle modifications (eg, eating healthier, becoming more physically active) in the service of HRQOL and not body weight per se.

Nonetheless, despite the evidence from this study that weight reduction confers considerable benefits on HRQOL, no consensus exists on what constitutes HRQOL, its domains, or how it is best measured. As it stands, most generic and disease-specific HRQOL measures focus on how patients are functioning, including their ability to carry out the usual roles in their lives. In essence, these instruments simply measure self-reported health status and are used essentially as proxies for direct assessments of functional performance. Although the conceptualization

of HRQOL as self-reported functional capacity has gained ascendancy in recent years, some researchers have argued that unless investigators tap into individual patient values, they are measuring only perceived health status, not HRQOL.⁶ In other words, an HRQOL score as typically derived does not reflect the values and meanings an individual places on his or her ability to perform a given function. The incorporation of individual values and preferences into HRQOL assessments will likely require researchers to supplement traditional questionnaire-based methodologies with other approaches (eg, cognitive interviewing, time trade-offs) to gather information both on the personal meanings associated with a given level of functioning and on the cognitive processes involved when one makes HRQOL judgments.⁷

Clearly, the effect of obesity on public health goes far beyond its medical consequences; it also produces profound decrements on HRQOL that, for many persons, may be of greater relevance than the obesity-associated medical comorbidities.⁴ Fortunately, the study by Samsa and colleagues demonstrates that even relatively moderate reductions in weight can produce noticeable improvements on HRQOL. Given the difficulties associated with losing and keeping off large amounts of weight, these findings suggest strongly that promoting small, sustainable weight losses may provide patients with the best of both worlds: a significant reduction in health risks¹ and a considerable improvement in one's capacity to live a full and satisfying life.

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