



## Weight loss expectations and determinants in a large community-based sample

Benoit Pétré<sup>a,\*</sup>, André Scheen<sup>b</sup>, Olivier Ziegler<sup>c</sup>, Anne-Françoise Donneau<sup>a</sup>, Nadia Dardenne<sup>a</sup>, Eddy Husson<sup>a</sup>, Adelin Albert<sup>a</sup>, Michèle Guillaume<sup>a</sup>

<sup>a</sup> Department of Public Health, University of Liège, Liège, Belgium

<sup>b</sup> Diabetes, Nutrition and Metabolic Disorders, CHU Liège, Liège, Belgium

<sup>c</sup> Department of Endocrinology, Diabetes, and Nutrition, Nancy University Hospital, France

### ARTICLE INFO

#### Keywords:

Overweight  
Obesity  
Population studies  
Weight loss expectations

### ABSTRACT

While weight-loss expectations have primarily been studied in people enrolled in weight-loss programs, the present study explores patient expectations about weight-loss and identifies related determinants in a large, non-clinical population.

3916 volunteers (age > 18 years) participated in 2012 in a community-based survey in the French-speaking region of Belgium. Participants were asked to define “dream”, “goal”, “happy”, “acceptable”, and “disappointed” weights. Other self-reported measures were used to determine each participant's body mass index (BMI), body image discrepancy (BID), subjective norm (SN), weight loss activity, weight history, quality of life (QoL), and demographic and socioeconomic characteristics. The study focused on the determinants of unrealistic weight-loss “goal” (≥ 10% of initial weight).

Results showed median weight loss targets ranged from 5 kg (“disappointed” weight loss) to 21 kg (“dreamed” weight loss). Respondents considered the recommended weight-loss target (5–10%) disappointing. Severe and morbid obesity categories are at high risk of unrealistic weight loss goal. Unrealistic weight-loss goals were associated with female gender, weight loss activity, overweight history and lower QoL in overweight and moderate obesity respondents.

These findings confirm the urgent need to help patients accept more modest weight loss outcomes and the need for personalized care that considers the patient's specific profile and both weight loss expectations and determinants.

### 1. Introduction

Studies on overweight and obese people entering weight-loss programs have shown major discrepancies between patient expectations and clinical guidelines. While weight-loss recommendations advocate a five to 10% reduction in initial body weight (many obesity-related conditions are significantly improved with such modest/moderate weight loss) (National Heart Lung and Blood Institute, 1998), obese people want to lose at least two to three times that much weight. The study by Foster et al. (1997) is often cited as the first to address this issue. That survey showed that the average goal for sixty obese women

(body mass index - BMI:  $36.3 \pm 4.3 \text{ kg/m}^2$ ) was a 32% reduction in body weight. A weight loss of 17 kg was considered disappointing, while a 25 kg loss was considered acceptable. Many other studies have confirmed these findings (Gelinass et al., 2013; Heinberg et al., 2010; Kaly et al., 2008).

Moreover, some studies suggest that people's failure to achieve their weight-loss goal leads to poor weight-loss outcomes such as unsatisfactory, negative emotions and even learned helplessness regarding the prospect of losing weight on their own in the future (Foster et al., 2001). In contrast, realistic expectations are associated with more positive health outcomes (psychological characteristics, eating behaviors,

\* Corresponding author at: Université de Liège, Département des Sciences de la Santé publique, Nutrition, Environnement et Santé, Quartier Hôpital, Avenue Hippocrate 13 (Bât 23), 4000 Liège, Belgium.

E-mail address: [Benoit.petre@ulg.ac.be](mailto:Benoit.petre@ulg.ac.be) (B. Pétré).

<https://doi.org/10.1016/j.pmedr.2018.08.005>

Received 15 February 2018; Received in revised form 4 July 2018; Accepted 3 August 2018

Available online 04 August 2018

2211-3355/ © 2018 The Authors. Published by Elsevier Inc. This is an open access article under the CC BY-NC-ND license

(<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

and success rates) (Wamsteker et al., 2009; Teixeira et al., 2004).

In addition, overweight individuals' difficulty maintaining weight loss over the long term is well known (Wing and Phelan, 2005; Curioni and Lourenço, 2005). In this context, researchers like Fontaine and Barofsky (2001) argued that obesity management should focus more on monitoring and prevention than on curing, suggesting that it is more appropriate to help patients accept more modest weight-loss outcomes. There have been few studies, however, aimed at better understanding the factors that influence patient expectations and outcomes. The available data suggest that higher expectations are associated with personal, clinical, social, and psychological characteristics (Foster et al., 2001; De Vet et al., 2013; Fabricatore et al., 2008).

The majority of these studies focused on patients who were enrolled in weight-loss programs (*i.e.*, those who had consulted a physician or were hospitalized due, in some way, to their condition) (Dalle Grave et al., 2004, 2005). Less is known, however, about the weight-loss expectations and related determinants in the general population (De Vet et al., 2013; Fabricatore et al., 2008; Provencher et al., 2007). However, in terms of public health, better understanding of the experiences and insights of overweight individuals (not necessarily enrolled in weight loss programs) is necessary and important to better target health promotion and prevention strategies. Additional research is needed to assess patient expectations in a broader population.

Based on these observations, identifying the determinants of weight-loss expectations – in particular weight-loss goal – using a population-based survey represents a major public health challenge, and could lead to specific interventions that encourage overweight and obese individuals to accept more realistic weight-loss goals. The purpose of this study was to improve our understanding of patients' weight-loss goals and expectations by looking at a large non-clinical population not specifically selected based on BMI and not involved in a specific weight management program (although wanting to lose weight), and exploring the determinants of those goals and expectations. Specifically, the authors aimed to explore weight-loss expectation (in particular the risk of reporting a unrealistic weight-loss “goal” ( $\geq 10\%$ )) and its correlation with some socioeconomic, demographic, quality of life, weight history, body image discrepancy and subjective norm variables in the “general” population.

## 2. Materials and methods

### 2.1. Study design and general approach

A survey was conducted in Wallonia (Belgium) as part of a larger project, EDUDORA<sup>1</sup> (which in French stands for “Therapeutic and preventive education on diabetes and obesity during adolescence and adulthood”) (Scheen et al., 2010). That project focused on Therapeutic Patient Education (TPE) in two metabolic disorders: diabetes and obesity. Specifically, EDUDORA aimed to (1) improve the quality of care for diabetes and obesity prevention in adolescents and adults using a multidisciplinary approach focused on TPE, and (2) involve primary and secondary healthcare professionals in a synergistic way.

The present research is a cross-sectional study based on a quantitative approach. A multimedia advertising campaign was used to recruit participants (Pétré et al., 2015). A website was developed with a 31-item questionnaire to collect data on sociodemographic and anthropometric characteristics, quality of life (QoL), obesity-related life experiences, expectations about weight loss and management, and other obesity-related psychosocial issues. The only condition for participating in the survey was being 18 years of age or older. Every attempt was made to avoid stigmatization, as described in a previous paper by Pétré et al. (2015).

<sup>1</sup> Education Thérapeutique et Préventive Face au Diabète et à l'Obésité à Risque chez l'Adulte et l'Adolescent.

### 2.2. Population

A community-based sample of 4155 adults was obtained covering a wide range of BMI values, including normal-weight respondents. Only subjects who expressed a willingness to lose weight were eligible for inclusion in the study, however.

### 2.3. Measures

#### 2.3.1. Dependent variables - weight loss expectations

Consistent with Foster's original proposal (1997), people were questioned about five different weight outcomes: dream weight (“the weight you would reach if you could weigh whatever you want”), goal weight (“the weight realistically people expect to lose”), happy weight (“the weight that is not as ideal as the first one; it is a weight, however, that you would be happy to achieve”), acceptable weight (“a weight that you would not be particularly happy with, but one that you could accept, because it is less than your current weight”) and disappointed weight (“a weight that is less than your current weight, but one that you could not view as successful in any way”). Weight-loss targets were calculated by deducting dream/goal/happy/acceptable/disappointed weight from current weight. Unrealistic weight-loss goal was defined as an expectation  $\geq 10\%$  of initial weight.

#### 2.3.2. Independent variables

The demographic and socioeconomic characteristics were BMI, gender, age (years), subjective economic status (easy or difficult), level of education (primary, secondary, or tertiary), household size (1 or  $> 1$ ) and perceived health (good or bad).

BMI was calculated as weight/height squared ( $\text{kg}/\text{m}^2$ ). Height and weight were self-reported. BMI was categorized according to the BMI categories used by the World Health Organization (1998): normal weight ( $18.5 \leq \text{BMI} < 25$ ), overweight ( $25 \leq \text{BMI} < 30$ ), obese class I/moderate obesity ( $30 \leq \text{BMI} < 35$ ), obese class II/severe obesity ( $35 \leq \text{BMI} < 40$ ), and obese class III/morbid obesity ( $\text{BMI} \geq 40$ ).

Other qualitative measurements were recorded, including body image discrepancy (BID), weight-related quality of life (WR-QoL), subjective norm (SN), and body weight history.

Body image discrepancy (BID): BID measures the “more or less” good visual estimation of the BMI by the subject. Participants were shown a series of nine body figures (1, smallest to 9, largest) asked to select which Stunkard et al. (1983) figure was the most closely resembling their current body size. BID was calculated by the following formula:

$$\text{BID} = \text{self-reported BMI} - \text{average BMI for the selected figure.}$$

Weight-related Quality of life (WR-QoL): QoL was assessed using a derived and simplified version of the French obesity specific quality of life questionnaire by Ziegler et al. (2005). Participants were asked to evaluate several aspects of life (physical and psychosocial) on a 4-point Likert scale (from total disagreement to total agreement) to know their feelings about 14 statements equally divided into physical problems (PHY-QoL) and psychosocial problems (PSY/SOC-QoL) (e.g.: “Because of my weight, I have trouble to dress or undress”). According to Ziegler et al., each response item was graded from 1 to 4 points (1 = total disagreement with the statement; 4 = total agreement). A score was calculated for both physical and psychological dimension by summing the respective items (range: 7–28 points). A total score (TOT-QoL) was also calculated (range: 14–56 points); the higher the score, the better the quality of life.

Subjective Norm (SN) is the perceived social pressure to engage or not to engage with a behavior, which is influenced by the importance each individual places on their appearance in the eyes of others. SN was calculated by asking the participants to respond to four statements using a four-point Likert scale (with 1 representing total disagreement with the statement and 4 representing total agreement) regarding the

Download English Version:

<https://daneshyari.com/en/article/8818443>

Download Persian Version:

<https://daneshyari.com/article/8818443>

[Daneshyari.com](https://daneshyari.com)