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The Road to "Severe Obesity": Weight Loss Surgery Candidates Talk About Their Histories of Weight Gain

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Much research focuses on the causes of weight gain, but few studies examine the perspectives of those who have been categorized as "severely obese." This paper discusses the findings of 54 interviews with weight loss surgery candidates in Newfoundland and Labrador, Canada. We explore participants' perspectives on their histories of weight gain, focusing on their explanations for weight gain as well as the emotions surrounding their weight gain experiences. We find that the dominant individualized, medicalized construction of obesity both (1) adds to the burden of blame for weight loss surgery candidates, with potential emotional health implications, and (2) overlooks key social determinants of health.

Keywords: *obesity, weight gain, weight loss surgery*

Introduction

There is an increasing body of literature from multiple disciplines on the causes of obesity (Greener, Douglas, & van Teijlingen, 2010; McAllister et al., 2009; Pearce & Witten, 2010; Popkin, 2011; Sallis, Adams, & Ding, 2011; Sharma & Padwal, 2010); however, there has been less focus on the perspectives and experiences of people who have gained large amounts of weight and even more rarely on those who have been categorized as "severely obese" (Body Mass Index [BMI] >40; Finkelstein et al., 2012; Public Health Agency of Canada [PHAC]/Canadian Institutes of Health Research, 2011; World Health Organization [WHO], 2012). It is particularly important to explore the perspectives of severely obese people because of the strong tendency in our society to ignore the voices of those who are "fat" (Murray, 2005, 2008; Rothblum, 2011). This paper explores the perspectives of weight loss surgery candidates on the reasons for weight gain as well as the emotions surrounding their weight gain experiences.

Background

Obesity and Its Origins

In the past decade and a half, increasing attention throughout the world has focused on weight gain and its potential health consequences (Cawley, 2011; PHAC/CIHI, 2011, WHO, 2012). Research shows that average body size is increasing, according to both BMI measurements and waist circumference (Janssen, Shields, Craig, & Tremblay, 2012; Must & Evans, 2011; Shields, Tremblay,

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Connor Gorber, & Janssen, 2012), and that increasing numbers of people fall into the categories of *overweight* (BMI 25-29.9) and *obese* (BMI >30), as well as severely obese (BMI >40) (PHAC/CIHI, 2011; WHO, 2012). The highest levels of obesity are linked to higher levels of health services use, chronic health problems such as Type II diabetes and osteoarthritis, and risk factors for cardiovascular disease (Twells, Bridger, Knight, Alaghehbandan, & Barrett, 2012; Fransoo et al., 2011; PHAC/CIHI, 2011; WHO, 2012). Rates of obesity vary widely by nation as well as regionally, and by gender, age, socio-economic class, ethnicity, and immigration status (PHAC/CIHI, 2011; Jolliffe, 2011; McLaren, 2011; Walker & Kawachi, 2011; Zhang & Wang, 2004).

The medical discourse on obesity has been strongly criticized by those who point out that a focus on obesity and a preoccupation with BMI addresses body size, not necessarily health and fitness (Campos, Saguy, Ernsberger, Oliver, & Gaesser, 2006, Oliver, 2006; Padwal, Pajewski, Allison, & Sharma, 2011; Saguy & Campos, 2011). They also point out that causal links between obesity and ill health are far from clear, that those in the *overweight* BMI category tend to live longer than those in the *normal weight* category (Flegal, Kit, Orpana, & Graubard, 2013), and that adiposity itself appears to be less important for health than factors such as sedentarism, nutrition, weight cycling, and overall strength, endurance, and fitness (Moskovich, Hunger, & Mann, 2011). Critics of the "war on obesity" also point out that any discussion of weight in our society is strongly intertwined with moral judgment and that "fatphobia" contributes to high levels of body image dissatisfaction (Granberg, 2011; Rothblum, 2011), intersecting with other types of social discrimination, including sexism, racism, ageism, classism, and homophobia (Bordo, 2004/1993; Meleo-Erwin, 2011; Monaghan, 2008; Murray, 2008; Sykes & McPhail, 2008; Scott-Dixon, 2008; Throsby, 2009).

In regard to the origins of the recent increase in human body size, most explanations have focused on what McAllister et al. (2009) termed "the big two": increased high-density food consumption and reduced physical activity. Weight gain, however, is a complex issue that is likely influenced by numerous epidemiological, environmental, economic, and cultural factors (Cawley, 2011). Recent research points to the potential role of factors as diverse as increased time spent in the sitting position, microorganisms, epigenetics, changes in typical ambient temperature, sleep deprivation, exposure to endocrine disruptors, side effects of various common medications, assortative mating, the higher birthrate associated with higher adiposity, changes in maternal age and nutrition, reductions in smoking rates, and changing economics in terms of food production and consumption (Government Office for Science, 2007; Janssen et al., 2012; McAllister et al., 2009; PHAC/CIHI, 2011). Ironically, the practice of dieting, the most common treatment advice, has also been shown to induce weight gain (Pietiläinen, Saarni, Kaprio, & Rissanen, 2012).

Our understanding of the issue of obesity is shaped by an interdisciplinary approach based on feminist developmental systems theory. Developmental systems theory was developed in the field of biology but has applications throughout multiple disciplines concerned with both organisms and behavior (Fausto-Sterling 2000; Meynell 2008). Developmental systems theory overturns the simplified nature/nurture dichotomy, emphasizing that the physical and behavioral characteristics of organisms, including human beings, are mutually determined by both genetics and the developmental environment, including the social environment. Bodies and behavior are constantly in process, and our social context shapes our physical bodies as well as the reverse (Fausto-Sterling, 2000, p. 235; Meynell, 2008). Developmental systems theory provides a framework for understanding obesity as a complex multicausal process with implications that vary widely in different bodies and in different social environments. A feminist approach to developmental systems theory emphasizes gendered social experiences as an important developmental factor and focuses on the gendered "interplay between cultural and political constraints and the physiology and anatomy of bodies" (Meynell, 2008, p. 89).

Weight Loss Surgery

Weight loss surgery is promoted as one of the sole effective weight loss interventions (Sjöström, 2008). The procedure offered in Newfoundland and Labrador is a laparoscopic sleeve gastrectomy, which irreversibly reduces stomach size by 80% to a small vertical "sleeve." There is a growing body of research examining the clinical outcomes of weight loss surgery (Bohdjalian et al., 2010; Himpens, Dobbeleir, & Peeters, 2010; Sjöström 2008). Recent research on laparoscopic sleeve gastrectomy, a relatively new procedure, shows sustained percentage excess weight loss of over 50% and improvement in numerous physical and mental health indicators (Himpens et al., 2010), though concerns remain about potential side effects, such as severe reflux (Bohdjalian et al., 2010). In Canada, the United Kingdom, and the United States, over 80% of weight loss surgery patients are women (Ellis, Macknight, & Wilkinson, 2006; Padwal, Chang, Klarenbach, Sharma, & Majumdar, 2012; Poulouse et al., 2005).

The small body of literature on weight loss surgery patients' experiences has found that weight loss surgery patients tend to draw on medical discourses that conceptualize weight loss surgery as a tool to control the body (Engström, Wiklund, Olsén, Lönroth, & Forsberg, 2011; Engström & Forsberg, 2011) and often describe the surgery as a transformation (Bocchieri, Meana, & Fisher, 2004) or a rebirth (Throsby, 2008).

Methods

Procedure

This paper is based on a qualitative study from the Translational Research Program in Bariatric Care at the Faculty of Medicine at Memorial University in St. John's, Newfoundland and Labrador, Canada. This program is led by a multidisciplinary team of researchers, healthcare professionals, and policymakers focused on improving health outcomes in Newfoundland and Labrador through collaborative, patient-oriented research.

We conducted 54 interviews with 21 female and 6 male weight loss surgery candidates recruited from the sole bariatric clinic in Newfoundland and Labrador. A research nurse offered a package of information about the study and invited patients to contact her if interested. Recruitment was purposive and the research team examined the demographics of the sample on an ongoing basis to ensure that participants from a wide variety of ages, education levels, and occupations were represented. As is the case nationally and internationally, men represent less than 15% of weight loss surgery candidates in Newfoundland and Labrador, and thus additional recruiting was required to reach a total of 6 male participants. In total, 27 of 51 patients approached (53%) participated in the study.

The study began with a grounded theory approach, designed to build theory from participants' accounts. As the research progressed, a hybrid inductive–deductive approach was developed. This approach combined the inductive methods of grounded theory, including constant comparative analysis, with feminist methods that emphasize the importance of reflexivity (Reid, 2004; Rice, 2007, p. 160). The four guiding principles of this approach were as follows: (1) *inclusion* of as wide a variety of participants as possible, (2) *participation* of participants in developing the focus of the research, (3) valuing participants' *embodied knowledge*, and (4) focus on the *complexity* and *diversity* of participants' perspectives and experiences.

The initial in-depth interview was semistructured and lasted from 60 to 90 minutes. The interviews were designed to explore specific topics of concern to the research team while also allowing

participants to delve into areas of most interest and relevance to them and to offer their own ideas for how bariatric healthcare could be improved. Participants were also provided with the opportunity to present their own ideas for future research, which has since led to the development of a follow-up interview study with the same group of participants at 12-months post weight loss surgery. Eight interviews took place in person and 19 by telephone, according to each participant's preference. The signed consent forms were collected by the interviewer or by letter mail. All interviews were digitally recorded, transcribed verbatim by a professional transcriptionist, and condensed by the interviewer into a one-page interpretive summary based on the participants' own words, which was also reviewed and validated for accuracy by the lead researcher. Both the full-length transcripts and the one-page summary were used in the analysis.

A second follow-up interview was conducted by telephone and lasted 10 to 40 minutes. The interviewer read the interpretive summary, gave participants the opportunity to offer feedback and identify gaps in the interpretation, and offered a paper copy of the summary. This step confirmed that participants recognized the descriptions and interpretation of the interview account and helped to improve the credibility of the researchers' interpretation (Sandelowski, 1986).

Participants

The majority of participants were Caucasian (26, or 96%, although 1 identified as aboriginal), married or living with a common-law partner (18, or 66%), had children (21, or 78%), and working full-time (16, or 59%). The average age was 45.3 years, ranging from 26 to 64. Six participants (22%) had a high school education or less, 15 (56%) had some postsecondary education, and 6 (22%) had a university degree. All had been approved for weight loss surgery by a bariatric healthcare professional. Twenty-six participants consented to completing a second phase of interviews at 1 year postsurgery (the one remaining participant decided not to undergo weight loss surgery).

In this paper, we use pseudonyms to distinguish participants, along with their general age range and occupational type. These details are intended to give a sense of individuals' particular life context, which is so important to feminist developmental systems theory, without providing any potentially identifying information.

Analysis

Analysis began as soon as the first transcript and interpretive summary were completed. Working independently, two coders (JTN and DG) conducted multiple readings of the transcripts, interpretive summaries, and the interviewer's written notes. The coders identified and coded emerging categories and themes and examined similarities and differences amongst these categories as well as between individuals and groups of individuals (Strauss & Corbin, 1998). Regular meetings were then held to discuss primary themes, and the two coders worked together to collapse the categories and identify possible relationships between and among major categories. The emerging categories, properties, and descriptors were further validated through an independent qualitative research consultant. This process resulted in a refined set of themes and codes. Particular attention was given to the importance of gender-based differences and gendered discourses in participants' accounts (Temple Newhook, Gregory, & Twells, Submitted).

Ethical Concerns

Ethical approval for this study was given by the Human Research Ethics Authority at Memorial University.

Findings

In this paper, we focus on participants' perceptions of their histories of weight gain. Specifically, we examine participants' (1) explanations for weight gain and (2) feelings about their experiences of weight gain.

All of the participants in this study had been approved for weight loss surgery with a BMI > 40, and would be categorized medically as severely obese; however, this terminology was rarely used by participants themselves and was sometimes rejected outright. For example, Carolyn, a professional in her 50s, identified herself as overweight but explicitly rejected the *obese* label: "I'm overweight, yes, but not obesely overweight." Most participants described their body size using terms such as *big*, *large*, *big-boned*, or *heavy*; however, there were also important gender differences in their terminology. Men tended to embrace the label *big guy,* while women described feeling defined by an overwhelmingly negative *fat girl* label (Temple Newhook et al., Submitted).

Explanations for Weight Gain

Interview participants talked extensively about what they perceived as the main causes of their weight gain. Participants described both important life events that they linked to rapid weight gain and gradual, incremental weight gain over their lifetimes. Important life events included childhood, pregnancy, lifestyle change, and illness or injury. Gradual processes included dieting itself, food consumption patterns, and physical inactivity and sedentarism. Participants explained their weight gain primarily in terms of individual factors, constantly negotiating with self-blame and the dominant construction of weight gain as personal failure (Throsby, 2007).From a feminist developmental systems theory perspective, however, participants' explanations for their weight gain also point to the importance of the social environment in weight gain—ways in which our society is structured that contribute to increased adiposity.

Important Life Events

In their accounts of weight gain, participants tended to identify transformational experiences in their lives that had led to significant weight gain, after which they said that it was "impossible" to return to their previous body size. For many participants, weight gain struggles began in childhood. In these cases, participants often drew on explanations of individual physiology, particularly genetics and metabolism, to explain their weight gain. Sam, an unemployed laborer in his 20s, said that he had been big since the age of 9: "It's hereditary. A lot of people in my family are big." Deirdre, an educator in her 40s, said, "I have never been slim. I have never been below a size 18, 20. Never. … I don't remember as a child being small." She added, "I know that part of it is genetics, because I really do believe that. I have a set of grandparents who were huge … I guess it is my metabolism." Such accounts enable participants to resist the blame associated with obesity by constructing weight gain as "a piece of implacable genetic 'bad luck'" (Throsby, 2007, p. 1564).

Other participants talked about mourning a previously slim adult life before an event they linked to rapid weight gain had occurred. Pregnancy was the most frequently mentioned event for women. Annie, a retired caregiver in her 60s, reported that she now weighs over 300 pounds, but recalled, "I only gained weight after I had my daughter … I was 127 pounds when I got pregnant … I went up to 181 and I never went below that after." Although previous research has focused on pregnancy as a critical period of weight gain for women, such research has tended to focus solely on the biological changes of pregnancy (Smith & Holm, 2011). As we have noted elsewhere (Temple Newhook et al., Submitted), however, participants made it clear that it was not necessarily pregnancy weight gain alone that created a turning point, but the associated expectations of motherhood—particularly the

increased childcare and domestic workloads—that followed. Heidi, a customer service worker in her 30s, explained, "You don't have the 'you time' to do what you need to do to try to take care of yourself a bit better. Everything is your children." Such explanations also touch on the influence of a dominant ideology of "intensive mothering" (Hays, 1996) that may impact women's health and well-being.

The third important event, lifestyle change, includes various life-changing experiences: bereavement, leaving home for the first time, and occupational change. Theresa, a retired educator in her 60s, talked about gaining weight after her husband died: "I ate my way through ... That was my comfort … I didn't go the gym and I didn't exercise … grief is strange. I was angry for a long time." Jennifer, a manager in her 40s, said that when she moved from her rural home to an urban center for university, "I gained 90 pounds in about 9 months. … I was going to school so I wasn't active at all, and I was eating takeout twice a day for my meals because it was cheap. I ate for free where I worked and I ate deep-fried food for all that time." Brian, a professional in his 40s, said that he started to gain weight once he started a desk job. Such experiences were often linked to emotional eating, as discussed below.

Still other interview participants talked about having experienced an injury or illness that had limited their mobility and led to weight gain. Derek, a customer service worker in his 30s, suffered a sports injury in his late teens: "I had a hockey injury, actually, is what started it. … I put on a lot of weight." He said that his weight gain was exacerbated by a changing lifestyle as he entered the workforce: "Sports stopped. … My weight just ballooned. The only way I know to describe it is it's like I went to bed being fairly active and in half decent shape and waking up and being 150 to 200 pounds overweight." His words illustrate the sense of suddenness that many participants associated with their histories of weight gain.

Gradual Processes

In addition to periods of rapid weight gain, many participants described weight gain that occurred as a gradual, incremental process. Participants linked gradual weight gain to (1) dieting itself and the vicious cycle of weight loss and subsequent regain; (2) emotional eating, specific food addictions, cultural eating habits, irregular eating patterns, and food quality and quantity; and less often, (3) physical inactivity and sedentarism.

Participants talked about losing and then regaining weight multiple times throughout their lives. Many said that they believed that dieting itself, and the continuous cycle of weight gain and loss, was itself an important contributor to their weight gain. As Vanessa, an office worker in her 30s, put it, "As good as I am at losing weight, after 5 or 6 months, I'm even better at finding it." Elsie, a homemaker in her 50s, said that she had been dealing with this cycle since she was a child: "I remember when I was 8, I was always on a diet. … I think that's what did it: watching your weight, adding it back on again, back and forth. Each time, you climb higher and higher." Their statements are supported by research, including a recent twin study from Finland (Pietiläinen et al., 2012), that suggests that those who diet tend to gain more weight over their lifetimes than those who do not.

Many participants blamed food as the cause of their weight gain, but there was a contrast between participants who felt that weight gain was caused primarily by food quality (eating the wrong types of food) and those who felt that weight gain was caused primarily by food quantity (simply eating too much food in general). Zoë, a customer service worker in her 30s, pointed the blame at food quality, referencing her enjoyment of fast food, and said wryly, "I'm 287 pounds. I didn't get this way from eating soup broth." In contrast, Elsie said, "I don't eat a lot of junk anyway, but I guess I just eat too much of the good foods." Participants negotiated with the dominant discourse that weight gain is a

straightforward matter of energy-in–energy-out (Pearce & Witten, 2010; Throsby, 2007), and in a variety of ways, participants explained how much more complicated this simple equation had been in their everyday life experience.

Emotional eating, or overeating in response to stress or trauma, was identified as a common reason for weight gain, particularly for women participants. Annie explained that she began gaining weight after a car accident in which her passenger was gravely injured: "I just could not stop [crying]. I couldn't stop and the more I thought, the more I ate, because this is what comforted me at the time." Wanda, a retail worker in her 30s, said,

> I've always got a good feeling from eating. …I had a lot of burden on me after my dad passed away, and [food] was just one of the things that made me feel good for the moment. It made me feel like crap after, but it made me feel good for the moment. It has gotten worse since then.

Several participants linked this emotional eating to specific food addictions. Gladys, a disabled factory worker in her 50s, said, "I'm addicted to candy. I will not bring candy into my house ever again… I've gone now almost 2 months. …It's almost like someone coming off drugs or something. You wean yourself off." Vanessa said that she felt overwhelmed by her addiction to cheese: "I had a huge, huge, huge cheese addiction. A 500-gram [18-ounce] block of cheese I literally could eat in 2 days. … I feel really controlled by my thoughts for food." Some compared eating itself to an addiction. Derek described his feelings about food and his sense of a lack of control of eating in detail:

> You can recognize what's going on but you can't control it. … Sometimes it feels almost like I'm an alcoholic. … I'll be clean and sober for a while, and then all of a sudden, bang, right into a bag of chips or right into [fast food]. … then you look at yourself in the mirror, shake your head, and say: 'What am I after doing?' Then you feel like crap. And the next day you're going to have to start again.

Participants also pointed to the role of cultural eating habits in weight gain, particularly a cultural pressure to finish the entire amount of food one is served. Gladys said, "I think it's bred into you … what's put in front of you, you eat. Because you don't get nothing until the next day." Vanessa noted that as a child, "I wasn't allowed up from the table until I cleaned my plate. … Every celebration is centered around food: potluck, buffet, jiggs dinner, everything. Our culture is really a food culture, and I guess most cultures are." Further research is needed to explore the ways that different cultural beliefs about food consumption have changed over time and how such beliefs impact actual food consumption and overall patterns of health and fitness.

Unintentional fasting, irregular eating patterns, and feeling out of touch with physiological feelings of hunger and satiety were additional factors offered as explanations for weight gain. Many participants said that they frequently went without consuming food for many hours or even days at a time, without sensing hunger. Heidi said, "I can go days without eating and … it doesn't bother me at all. I can also have days where I'm like, 'Oh my God, I can't believe I just ate that—all of that.' I go from one extreme to the other. … It's like I never feel full." Penny, a homemaker in her 30s, described similar experiences: "My biggest problem was never overeating, it was never eating enough. I would get up in the morning and not eat anything until supper time. It never, ever bothered me … I could go days without eating and it wouldn't bother me." Proponents of the Health at Every Size movement (Bacon & Aphramor, 2011) emphasize the importance of learning to tune in to one's feelings of hunger and satiety as a way of disentangling oneself from the pervasive cycle of binging and dieting.

Finally, physical inactivity and sedentarism were identified by participants as a cause of weight gain. As we outlined above, injury and associated immobility was identified as particularly important. Participants talked about the difficulty of fitting in leisure-time physical activity between full-time sedentary occupations and childcare workloads. Jennifer said, "It's the activity level. I work all day, and I'm sat on my butt all day long. I have two kids at home. So the story goes." In addition, participants explained that once they had gained weight, it was very difficult to move comfortably. This was partially a physical problem, as Brian explained: "You get into a circle because you can't [exercise] because you have the weight on. You need to do things to get the weight off, but you can't do it because you got the weight on." Body size could also be a psychological obstacle to exercise, linked to the strong social stigma of being severely obese (Lewis et al., 2011), however. Wanda said,

> I want to be active. It's something I've always wanted, but I feel [my size] is in the way. It ain't that I can't do it, because I can do it; it's how I'm looked at while I'm doing it. … I can leave here and I can walk [3 miles] and back. I can do it. It's just that when I'm doing it, it's the fear I have that everybody is looking at me.

Social Structural Factors

Given the dominance of an individualized, medicalized discourse on obesity, as well as the immediacy of the issue to their own personal lives, it is not surprising that participants focused primarily on individual reasons for weight gain. This reinforced a strong sense of self-blame. Natalie, a youth worker in her 20s, said that her weight gain was "my fault for not having enough self-control over the bad [foods] … if I had more self-control about those kinds of things, then I probably wouldn't be sitting here today." When participants did identify structural factors that could lead to weight gain, they were quick to follow such suggestions with reassurance that they were not trying to avoid personal responsibility, as did Derek: "I'm not trying to use that for an excuse." The focus on individualized blame for weight gain averts attention from potentially important social determinants of health. As Brian put it, after listing numerous structural factors that he felt had influenced his weight gain, "That's all kinds of excuses, but it's also reality."

McAllister and colleagues (2009) identified the marketing of processed food and "institutionally driven reductions in physical activity" as the two dominant explanations for obesity in the media and in research. In this research, weight loss surgery participants touched on these explanations, but also pointed to structural factors such as socioeconomic class, occupational work schedules, domestic workloads, occupational injuries, and the built environment, including rural–urban differences.

The connection between socioeconomic status and obesity has been well-established in research, particularly for women (Flegal, Carroll, Ogden, & Curtin, 2010; McLaren, 2011; Mirza, Fitzpatrick-Lewis, & Thomas, 2007; PHAC/CIHI, 2011). Many participants with lower incomes specifically identified the expense of exercise programs and weight loss regimes as a significant obstacle to their efforts to lose weight. Brenda, a caregiver in her 40s, said that herbal diet pills had helped her to lose weight, but she regained the weight she had lost after being unable to afford to continue: "The thing is if you are unemployed, that is a lot of money." Gladys had tried many different weight loss programs, but, "Everything costs so much. Weight Watchers right now is $20 a week. That's $80 just to go get weighed. You can't afford it—you really can't afford it." Zoë pointed out that outdoor exercise was too difficult for her in winter conditions, and indoor exercise in a gym was out of her reach financially, and gave specific policy recommendations: "They're always telling people to lose weight, that we're an overweight province. Well, help out a bit. Make gym memberships a little more cheaper, make it a little more accessible to people."

Occupational work schedules were also identified as a barrier to physical activity. Much modern occupational work is designed to be sedentary, and standard 9-to-5 work schedules can make leisure time scarce, particularly when combined with commuting, childcare, and domestic workloads (Temple Newhook, 2012; Duxbury & Higgins, 2003). Many employed participants, particularly those with children, said that they found it very difficult to find leisure time in which to be active. Brian explained,

> When you're sitting at a desk 40, 45, or 50 hours a week, you're trying to establish yourself so that people are looking to you, so you get promotions as opposed to someone else, so you're putting in those extra hours and you're coming home tired. You're sitting down for supper, and then it's 7:00 at night. Okay, when do I do anything now?

Those who work nonstandard schedules may also have particular challenges. Zoë said that she works night shifts of nearly 12 hours and finds that this schedule makes it difficult to access exercise programs.

Further, as noted earlier, many female participants identified domestic workloads, particularly childcare, as a factor in their weight gain (Temple Newhook et al., Submitted). Research has clearly demonstrated the changing—but strongly gendered—nature of domestic work (Temple Newhook, 2009; Offer & Schneider, 2011), but there has been little exploration of the role of gendered domestic work in weight gain. Wanda explained, "I got the two kids. I have a gym membership, a family gym membership; it's just that we never get there. I work all day. When I get home I'm tired. … Just finding the time is hard." Given that leisure time itself is socially distributed (Stalker, 2011), we argue that the public health emphasis on leisure-time physical activity (e.g., the ParticipACTION program in Canada), which in fact forms a small fraction of most individuals' physical activity (Csizmadi, Lo Siou, Friedenreich, Owen, & Robson, 2011; Ratzlaff, 2012), can add considerably to the burden of stress for those with the least available leisure time, particularly mothers of young children (Temple Newhook, 2009), without addressing the social inequalities behind leisure time distribution.

Participants also revealed the potential role of injuries in weight gain, particularly occupational injuries. Research has shown that lower socioeconomic status is associated with higher rates of injury (Atlantic Collaborative on Injury Prevention, 2012), and occupational injuries occur at much higher rates in precarious work (Quinlan, Mayhew, & Bohle, 2001). Michael and Olive, both in their 60s, had been physically disabled in serious occupational accidents: Michael as a laborer, Olive as a caregiver. Both talked about the psychological and physical health consequences of their accidents and said that they had been quite slim up until their life-changing injuries, but had gained large amounts of weight during extended periods of immobility. Olive explained that after her accident, "I was not able to exercise, not able to walk, not able to do anything, and I just kept gaining the weight, the weight, the weight. I was only 114 pounds when I got hurt at work and now I'm 250." Further attention is needed to the issue of injury as a precursor to weight gain, particularly with attention to the social inequality inherent in injury rates.

Finally, participants suggested the importance of the built environment in weight gain. One participant suggested that rural–urban differences could be important. Brian talked about the differences between physical activity in the rural community in which he had previously lived versus the urban center where he now resided. He said that when he lived in a rural area, he was

> … always doing things outdoors, which is the normal part of life [in a rural community]. I moved to the city, and … some of the activities we took for

> granted, like walking outside and being able to skate on the rink or the pond just behind the house, those kinds of things, they weren't as easily able to do here. So now, all of a sudden, you had to leave your house, drive outside the city, or drive to the rink and try to find the time that the rink was open and things like that. So it was just more of a challenge to do that.

Such concerns are echoed by research on obesogenic environments (Pearce & Witten, 2010; Stafford et al., 2011), although further research is needed comparing rural and urban environments.

Emotions

> I guess the most I've ever lost at one go is 70 or 80 pounds, which is a lot of work, a lot of time, a lot of discipline and denial. Then, no matter what, it seems like every time, after a couple of months, it starts creeping back. And then all of a sudden, you are where you were or worse. Then it's like, 'Oh my God, how did I do that? How could I be so stupid?' Then you beat yourself up again. – *Faith (educator in her 40s)*

The lived experience of gaining large amounts of weight—and particularly, the emotions associated with this process—is often missing in research on obesity; however, the emotional landscape of weight gain is an important part of understanding weight loss surgery candidates' histories of becoming severely obese. One of the principal emotions expressed by participants was the feeling that their weight gain made them not "normal." Those who had struggled with their weight since childhood frequently expressed the sense that their size had always set them apart from others. Irene, a customer service worker in her 30s who described being overweight since childhood, said "I don't remember ever being a normal size, normal to my peers at any age." Participants who had previously been much slimmer also used the language of normality to contrast their current life with their previous life. Jennifer recalled, "I used to be athletic. I played volleyball, I was a synchronized swimmer, and I was a figure skater. … I was a skinny kid, a normal teenager." Karen, a homemaker in her 50s, drew on a BMI definition of weight to describe what she felt was an extremely distressing transformation from normal to not normal: "I was never heavy, never. I was always a normal weight or underweight. … I was always really thin and wore really stylish clothes. … It's really devastating [because] it's not like I've been fat all my life." Such negative emotional reactions to weight gain and internalized fatphobia (Bordo, 2004/1993) may be exacerbated by medical BMI terminology that precisely defines normality with a narrow window of body size (Monaghan, 2008).

Participants also expressed a high degree of frustration with their experiences of weight gain. This frustration was most evident when participants compared themselves to peers who were not struggling with weight gain. Natalie said that she felt frustrated comparing herself to her smaller friends: "It's just like, I can eat the same and work out the same [as my friends], but still gain weight. … That was frustrating too." Deirdre said that she found her struggle with weight loss frustrating because she felt it reflected on her personal competence. She explained that she believed herself to be a disciplined person, but felt that her weight gain contradicted that assertion: "Self-discipline is—it frustrates me, the fact I can go to university, I can accomplish all of these degrees, I can do whatever I put my mind to, but I can't lose this weight. It is very, very frustrating." The automatic linkages made between weight gain and personality once more point to the strong force of fatphobia in our society, as well as a dominant societal discourse on obesity that emphasizes individual responsibility for body size and health (Bordo, 2004/1993; Rothblum, 2011).

Finally, participants talked about feeling that they had exhausted every possible means of losing weight. Brian said that over the years, he had tried "working out, cutting back, high-carb diets, low-

carb diets, high-fat diets, low-fat diets, eat-everything-you-want diets, starve-yourself-to-death diets—it's just over and over and over." Sam illustrated how this repetitive loss and gain sometimes led to a sense of resignation: "It's practically impossible for me to lose weight, even if I starved myself." Karen also expressed the sense of failure associated with constant weight loss efforts:

> I tried every diet through the years that you can imagine. I would sometimes lose probably 50 pounds, hit a plateau, and absolutely nothing would work past that, no matter how much I exercised or dieted, starved myself. Whatever happened, it just would not budge. So you just give up after that. The weight piles right back on.

These findings point to the importance of understanding weight gain from a multidisciplinary perspective—combining insights from psychology with those of sociology, epidemiology, medicine, and other disciplines—in order to bring increased attention to the emotional health concerns associated with weight gain. This study also adds to the call for further research exploring the links between weight gain and mental health (Moskovich et al., 2011; Sharma, 2012).

Discussion

In our exploration of weight loss surgery patients' perspectives on their histories of weight gain, we have examined both participants' explanations for weight gain as well as the emotions they associate with gaining weight. What participants' explanations and emotions both reveal are serious problems with our society's dominant individualized, medicalized approach to obesity.

Throsby (2007) found that weight loss surgery patients both reinforced and resisted the dominant construction of obesity. They accepted fatness as a problem to be solved and weight loss surgery as a solution but attempted to resist moral blame. The healthcare system in Canada is beginning to approach obesity as a chronic disease (Must & Evans, 2011), and the weight loss surgery candidates in this study occasionally adopted the language of chronic disease to describe their struggles with weight gain. Vanessa said, "Obesity is not a choice. I didn't choose to be obese. … It happened gradually over time. But I do want to fix it." The chronic disease model has the advantage of shifting blame from individual self-discipline to an unfortunate inheritance of individual biology; however, this model is also problematic in that it continues to medicalize obesity, simplifying a complex personal, social, and cultural issue by constructing it as a straightforward, diagnosable medical problem. From a feminist developmental systems theory perspective, the medical model also continues to individualize the origins of obesity, overlooking key social health determinants.

This individualized, medicalized focus also tends to prioritize individual weight loss treatments, including surgery, over addressing the social structural factors that are so strongly linked to excess weight gain (Fransoo et al., 2011; Greener et al., 2010). For example, the emphasis on emotional eating in participants' perspectives on their histories of weight gain, particularly for women (Temple Newhook et al., Submitted), points to the importance of a holistic approach to weight gain that specifically addresses emotional health concerns. Additionally, although weight loss surgery may be beneficial on an individual basis (Sjöström, 2008), it does not address the root causes of the decrease in physical fitness (and correlated increase in body size) of the global population. From an epidemiological perspective, there are many potential genetic and physiological elements to explore (McAllister et al., 2009) that may help lead to future global health improvements. Additionally, from a feminist developmental systems theory perspective, improving population well-being also means tackling social inequalities—including those based on size, gender, socioeconomic class, age, ethnicity, ability, and sexual identity—that shape people's abilities to be healthy and fit. It means

challenging size-based stigma and our unhealthy societal obsession with weight loss and dieting (Bordo, 2004/1993); designing safe and accessible built environments and neighborhoods; improving access to the natural environment and public outdoor space (Pearce & Witten, 2010; Stafford et al., 2011); closely examining the roles of the processed food and weight loss industries; improving access to healthy, sustainable food sources; questioning the forced sedentarism of many occupations and education systems; examining factors that leave many with too little sleep or leisure time, including increased screen time as well as occupational and domestic workloads; and exploring the roles of family and community in supporting well-being (Cawley, 2011; Greener et al., 2010; Oliver, 2006).

Application to Practice

For healthcare professionals, both those in the bariatric field as well as general practitioners, we suggest applications for the care of patients who identify weight gain as problematic. First, we encourage healthcare professionals to become aware of the social context for weight gain and of the destructive force of blame and stigma in discussions of weight gain with patients. Improved training for healthcare professionals in dealing with weight issues is vital. Secondly, we challenge healthcare professionals to move away from a simplified energy-in–energy-out explanation of obesity, which also means discouraging the recommendation of dieting as a treatment. We encourage healthcare professionals to critique the dominance of BMI in patient assessments and consider comprehensive ways of assessing and treating patients, such as the proposed Edmonton Obesity Staging System (Padwal et al., 2011) and the *5 A*s (ask, advise, assess, assist, and arrange) of behavioral counseling (Rao et al., 2011). Finally, we emphasize the importance of a compassionate, holistic, empowering approach to the issue of weight, based on an understanding of health and well-being that recognizes the interconnectedness of physical, mental, emotional, social, and spiritual well-being.

Limitations and Recommendations for Future Research

This study included just six male participants, and thus, there remains a need for research involving a wider variety of male weight loss surgery patients' perspectives. The sample also came from a population (the relatively isolated Canadian province of Newfoundland and Labrador) that is highly homogenous in terms of cultural background and would be complemented by further research in multicultural communities.

This study also focuses solely on the presurgery waiting period for weight loss surgery patients and does not capture the patients' experiences postsurgery. A research project involving follow-up interviews with this sample of participants 12 months post weight loss surgery is currently ongoing, however.

Conclusion

This research examined the perspectives of individuals who are waiting to undergo weight loss surgery, focusing specifically on their histories of weight gain, including both their explanations for weight gain and the emotions surrounding their experiences of weight gain and loss. We found that dominant ideas about obesity individualize and medicalize a complex and varying human experience. This dominant construction of obesity contributes to an atmosphere of individual moral blame and also detracts from attention to serious underlying social inequalities.

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