Obesity Surgery, ***12****, 781-788*

Perceived Psychosocial Outcomes of Gastric Bypass Surgery: A Qualitative Study

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Background: Attempts to understand postoperative psychosocial changes in the lives of individuals who have undergone gastric bypass surgery for morbid obesity have 1) been guided by constructs emanating from the assumptions of researchers, and 2) have resulted in fragmented conclusions that catalogue changes without theoretically integrating them.

Materials and Methods: Using unstructured and semi-structured interviews and in-depth focus groups, 31 patients were asked in an open-ended fashion about the ways, if any, in which gastric bypass surgery had affected their lives. Grounded theory methodology was utilized in order to identify emergent themes and their interrelations, and build a meaningful, comprehensive theory of life after gastric bypass.

Results: Patients' report of a rebirth/transformation was identified as the core process of the theory. The changes marking this process were clearly conceptualized in dichotomous terms comparing pre to postsurgical life. Patients reported changes that they regarded as unequivocally positive, a number of which had not been previously reported in the literature. Unique to this particular study was the finding of numerous life changes that generated tension and posed challenges in various aspects of patients' lives.

Conclusion: The grounded theory proposes that the extent to which patients successfully negotiate tension-generating changes may be a major determinant in the long-term outcome of gastric bypass, both weight loss and psychosocial adjustment.

Key words: Gastric bypass, bariatric surgery, morbid obesity, quality of life, qualitative, grounded theory

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Introduction

The medical research on obesity surgery is rich and elaborate, showing that surgery is generally effective in producing dramatic weight loss and reduction of obesity-related comorbidities. What still remains unclear is the extent of the psychosocial impact of surgery and the ways in which these psychosocial outcomes are related to the ability to maintain weight loss.[1,2] Formulating a thorough theoretical conception of the ways in which patients' lives are impacted by surgery is challenging, if not impossible, when one examines the existing psychosocial outcome literature.[1] The vast majority of studies have utilized quantitative measures in an attempt to assess what researchers assumed to be the constructs associated with psychosocial outcome of surgery. These assessment measures typically do not allow for a heterogeneity of patient responses and thus increase the likelihood that the patients' experience is only partially conveyed and understood. What remains are fragmented conclusions that have compartmentalized isolated psychosocial changes without theoretically integrating them.[1]

The present study attempted to reconstruct our understanding of the psychosocial phenomena associated with gastric bypass surgery, inducted directly from the patients' point of view. Qualitative methodology was utilized in order to: 1) provide the richness of detail currently missing from the literature; 2) escape researcher assumptions/biases about potential outcomes (positive and negative), and; 3) guide the relevance of future quantitative outcome studies and intervention plans. In formulating a grounded theory of the psy-

chosocial outcome of gastric bypass surgery, isolated constructs addressed in previous studies were integrated with novel information identified in this particular study. The ultimate aim was to construct a theory that typifies the psychosocial phenomenon of gastric bypass patients, while honoring the uniqueness of each individual's experience.

Materials and Methods

Sample

Participants consisted of 31 postoperative gastric bypass patients recruited from a university-based hospital (23 female). The time elapsed since surgery ranged from 6 months to 11 years (mean 28 months). The mean age of patients was 41 years (range 30-53). Ninety-four percent were European-American (N=29) and 6% were Latino (N=2). Twenty-two of these patients participated in a 90-minute individual interview, while the remaining 11 were assigned to either male- or female-only focus groups.

Procedure

The initial portion of the individual interview asked patients in an open-ended manner to describe the ways, if any, in which gastric bypass had affected their lives. Once patients were no longer able to elaborate on their perception of the ways in which the surgery and attendant weight loss had affected their life experience, the interview proceeded with semi-structured prompts of areas not yet addressed. Questions utilized in the group interview were derived from the data analysis of the individual interviews and were designed to check the emergent theoretical categories. The primary author conducted all interviews, each approximately 90 minutes in length.

Data Interpretation and Analysis

Interview data was collected and analyzed using the grounded theory method of qualitative research.[3-7] The basic premise essential to grounded theory is that the theory must emerge from the data, rather than from preconceived notions formulated by the researcher. This must go beyond a purely descriptive account to a theoretical formulation of the phenomenon being studied.[3] Data collection and analysis were deliberately interweaved, a process known as theoretical sampling, so that subsequent questions could be revised to reflect and check the emergent grounded theory. A core category was identified which tied all concepts together and unified the grounded theory.

To ensure that in the process of coding we had not distorted patients' responses, patients who had participated in individual interviews were each hand-delivered a copy of their transcripts as well as a summary of the categories and emerging theory. Patients were encouraged to rate the extent to which the researcher had accurately depicted their experience from 1 to 10 (with 10 being "completely") as well as provide any additional comments. This process helped to ensure that the deductive and inductive processes that are integral to building a sound grounded theory were operating concurrently, without the authors' preconceptions guiding the analysis. In addition, a second researcher was consulted throughout the entire data analysis process to assist the primary author by challenging ideas, assisting in the construction of categories, and building the theory.

Results

The Grounded Theory

Patient ratings and feedback indicated that the researchers had accurately interpreted both the content and the meaning of their experience following gastric bypass. The core process that emerged from participants' descriptions of life after gastric bypass can best be described as one of rebirth and transformation. The surgery seemed to be a landmark in their psychic landscape that created a clear, dichotomous division between their old, presurgery life and their new, postsurgery one. The cascade of life changes attributed by participants to the surgery and consequent weight loss were numerous and varied. Some changes brought

about unqualified benefits and were universally described as unconditionally positive in their impact. Perhaps the most notable finding was that a greater number of life changes seemed to generate tension. This tension was not described as necessarily negative, but as challenging – the tension of becoming a full participant in a complex world with new demands. Old ways of dealing with life's issues no longer applied and new ways were unfamiliar, requiring a set of skills at which participants were not yet necessarily adept. Postsurgery life seemed to consist of a daily negotiation of these tensions. This emergent theory proposes that the extent to which patients successfully negotiate the tension may be an important determinant of the long-term outcome of gastric bypass. A more elaborate account of the grounded theory is presented in the rest of this "Results" section. For a schematic representation of the proposed theory, see Figure 1.

Rebirth/Transformation

Data support the core process of rebirth or transformation as being central to the outcome of gastric bypass. This concept of transformation/rebirth was presented in various forms, such as getting a sec-

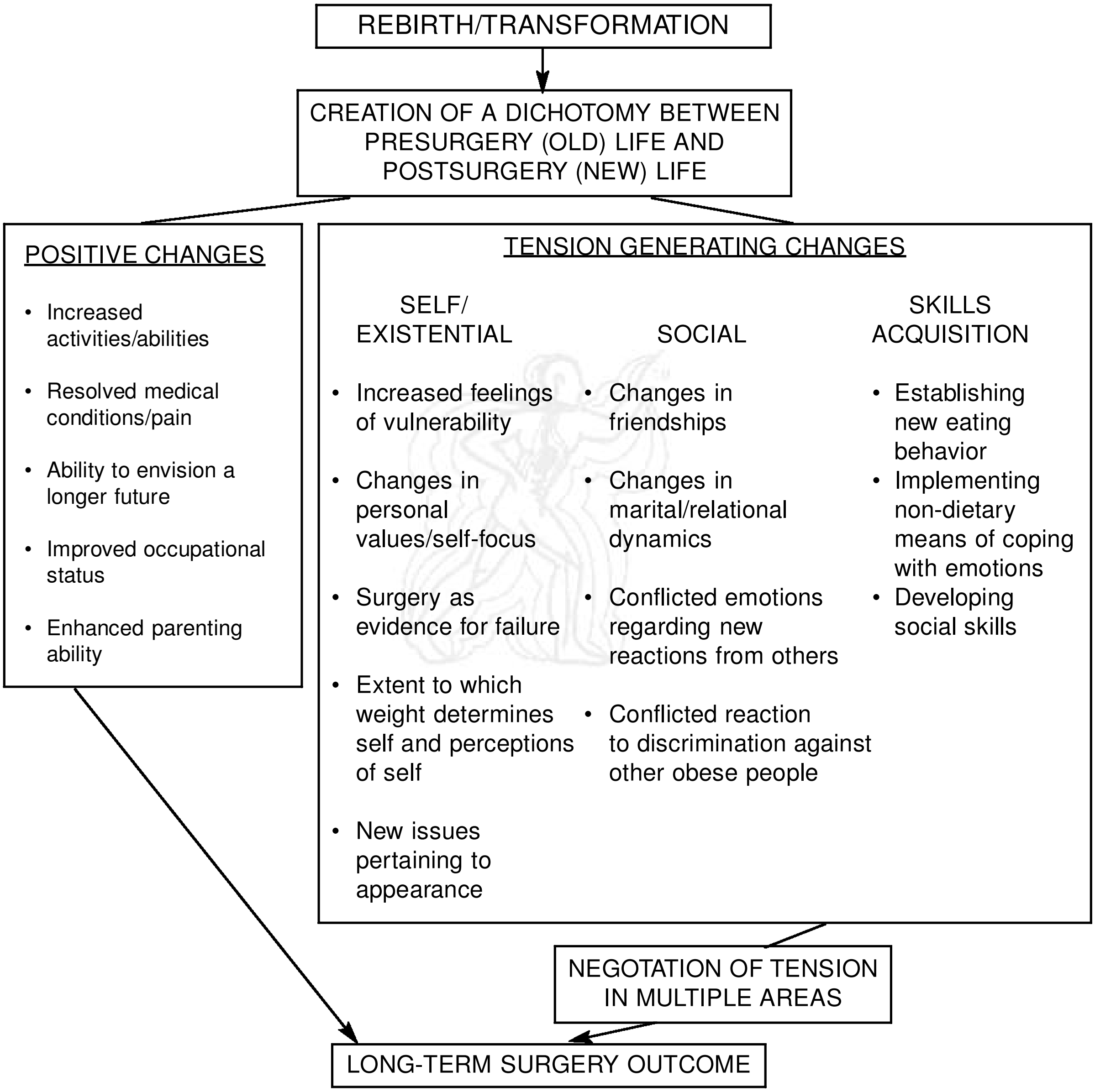

Figure 1. Schematic representation of the grounded theory.

ond chance at life, suddenly becoming visible to a world in which they once felt insignificant, and developing a newfound sense of freedom from preoperative entrapment in their own bodies. Patients who recall suffering from the most severe psychosocial impairment and desperation preoperatively tended to experience the most dramatic rebirth/transformation. This experience sets up a dichotomy between the old presurgery self and the new postsurgery self. Every aspect of life after surgery seemed to be compared to its presurgery analog in a search for contrasts. The search definitely yielded a long list of change for most individuals. An analysis of these life changes showed that they could be generally categorized into either unqualified positive changes or changes that generated some degree of tension, even if they seemed positive at face value.

Positive Changes

The most prevalent benefit/positive outcome cited by patients was an increase in activities and physical abilities. Surgical weight loss alleviated preoperative restrictions and patients regarded their ability to function physically and "fit" into society as an enormous benefit. The complete resolution, or dramatic improvement, of life-threatening medical conditions and obesity-related pain was also regarded as an unqualified positive outcome of surgical weight loss. As their health improved considerably, patients also began to envision the prospect of a longer, healthier, more satisfying life. Additionally, as energy, mobility, and confidence increased, patients who were raising children described an enhanced ability to parent. They typically described an increase in the quantity and improvement in the quality of time spent with their children. They also reported that as they focused on healthier living, the eating habits and activity levels of their children began to improve as well. Another unqualified positive change after surgery was a dramatic improvement in the occupational status of most patients. Patients reported going back to school to pursue careers in desired fields, job promotions or transfers to positions more closely related to servicing the public directly, and some even reported being able to return to work after years on government assistance for obesity-related disabilities.

Tension-Generating Changes

While the aforementioned positive outcomes were consistently affirmed, weight loss and its accompanying rapid transformation were also reported to effect many changes that created tension in various aspects of patients' lives. These tension-generating changes were not necessarily viewed as negative in nature, but they posed dilemmas that patients felt they had to work through or struggle with. These can be classified as existing in three primary spheres of patients' lives: the self and existential concerns, the social realm, and the domain of skills acquisition.

Self/Existential

Increased feelings of vulnerability. One major existential challenge for many patients was the surprising realization that some of the problems that they had preoperatively blamed on weight, persisted after weight loss. These patients recognized that they had used weight as an excuse for not accomplishing certain goals or as a way of protecting themselves from addressing painful fears, obstacles, or rejection. Despite the burden of obesity, the weight had also, paradoxically, served an esteem-preserving function. As weight became a non-issue, patients could no longer use it as their defense for not undertaking new challenges or for failing when they did. Tension built as weight loss uncovered weaknesses, insecurities, and realities that the old self did not have to deal with, and the new self was not entirely prepared to face. Patients were forced to consider internal rather than external factors contributing to their limitations.

The protective function of weight was not just esteem-preserving – it also shielded certain individuals from anxiety-producing situations that might be more frightening than flattering. One prominent version of this was reported by certain female patients with a past history of sexual abuse. These women reported feeling as if weight had protected them from being viewed as sexual by men. As they lost weight, tension developed because they felt increasingly vulnerable and fearful of encounters that, though esteem-enhancing, would throw them into the "unsafe" world of sexuality.

Change in personal values/self-focus. Patients commonly experienced a shift in their value system, primarily with regard to the value placed upon their own lives. They described various ways in which they had settled preoperatively for far less than they are willing to settle now. Tension arose when various aspects of patients' old selves were no longer compatible with new standards. Patients who described a presurgical pattern of consistently placing other peoples' needs ahead of their own experienced tension as they learned to assert themselves appropriately while not becoming excessively self-focused.

Surgery as evidence for failure. Some patients felt that because they had been unable to succeed in losing weight "on their own" and had finally resorted to surgery, it reflected or would be perceived by others as weak-willed. This sentiment was especially common in patients who had otherwise been successful in their lives and viewed weight loss as their one major achievement failure. They reported shame and embarrassment about the surgery. Some experienced a gradual process of acceptance with regards to their decision. For others, these feelings persisted even after the realization that gastric bypass still demanded Herculean effort and will-power to maintain weight loss.

Extent to which weight determines self and perceptions of self. Along with the dramatic changes in physical appearance consequent to weight loss, patients also experienced radical shifts in behavior, treatment by others, types and level of activity, dress, health, mood and relationships. These changes left many patients wondering who exactly they were. It was disturbing to some individuals to consider the unimaginable impact that weight had had on their self-definition and the ways others viewed them. This de-stabilization of their self-concept required some autobiographical revisions and adjustment, even when the result was an improved self-concept. A surprising number of patients reassigned the blame that they had placed on society for mistreating them presurgically to their own unwillingness to interact with the world.

New issues pertaining to appearance. Although most patients were pleased with the changes in their appearance, one commonly reported undesirable consequence of significant weight loss is the emergence of folds of sagging skin. The severity of the skin problem depends upon the patients' age and the extent of their obesity at the time of surgery. Some patients in our study became more self-conscious about the skin than they had been about their obesity. Deliberations about whether to undergo an additional surgery to have the excess skin removed created tension. Several patients also felt as if surgery and the subsequent rapid loss of fat hastened the aging process, making them look thinner but older.

Social

Changes in friendships. Many patients experienced changes in their friendships. For most, this conflict began when old friends reacted differently to the new self. Patients commonly hypothesized as to why they had lost friendships. Often cited reasons were jealously and insecurity on the part of the old friend, role changes in which patient was no longer the 'fat friend," or that activities associated with old friends were no longer conducive to patients' new lives. For others, increased self-worth led to a reevaluation of previous friendships and the decision that certain relationships were no longer constructive.

Changes in marital/relational dynamics. Some patients experienced improvements in their relationships with spouses/significant others. They found that increased energy, better mood, wider range of possible activities, and the prospect of a longer future enhanced their relationship. However, other patients found that changes created conflict as they de-stabilized old relationship dynamics. Several patients who were pre-surgically dependent on partners reported an increase in autonomy as they lost weight, expanded their repertoire of activities, and gained confidence. This created tension because partners no longer felt needed, and in some cases, patients realized that they no longer needed their partners. Partners often reacted with insecurity and fear of abandonment as patients become more attractive and desirable to other people.

Sexual functioning was another area impacted by surgical weight loss. All patients who addressed the topic of sex found sex to be easier due to improved mobility, agility, energy, and stamina. For some, changes in sexual function were regarded as strictly positive. However, several

patients described a dramatic decrease in sexual desire after surgery. Some attributed this loss of desire to the aforementioned excess skin problem negatively impacting their body image, while others blamed it on their new relationship problems.

Conflicted emotion regarding new reactions from others. It seems as if the increased respect and positive attention from others would be experienced as unequivocally positive by patients. For some, that was the case. However, many patients discussed struggling with feelings of resentment and anger at people who treated them better than they had preoperatively. Suspiciousness sometimes even spilled over into interactions with people who had not known them preoperatively. The question remained, would this person have treated me this well when I was obese? Are they reacting to me as a person or to how much I weigh?

Conflicted reaction to discrimination against other obese people. Most patients recalled experiencing obesity-related discrimination prior to surgery. Of the patients who lost a significant percentage of their excess weight, several recounted experiences in which they witnessed discriminatory or derogatory comments made toward obese people. This created tension, as patients experienced feelings of both relief and anger – relief that they were no longer the targets of discrimination and anger that others continued to be.

Skills Acquisition

Establishing new eating behavior. After surgery, patients must modify their eating behavior dramatically. Initially, any deviation from these strict guidelines is likely to result in the aversive experience of dumping. During these early months, they typically drop the majority of their excess weight lost, but it starts to gradually taper off after 6-12 months. What was first a fairly straightforward and seemingly inevitable weight loss ends up requiring more and more psychological control. Patients start testing what they can, or cannot eat, and how much and how often. They may learn that certain foods that at first made them sick can now be tolerated and that their stomach has increased its capacity from only 4 oz to 5 or 6. They may discover that whereas binge eating may be impossible, eating steadily throughout the day is not. These discoveries can slow down or halt weight loss that remains contingent on adherence to dietary guidelines, regardless of the expanding capabilities of their stomach. Patients must establish lifetime eating habits in order to lose the weight that they want to lose and maintain that loss. For the majority of patients this was an everyday struggle, sometimes reminiscent of failed dieting attempts of the past.

Implementing non-dietary means of coping with emotions. Patients who considered themselves to be "emotional eaters" typically had the most difficulty adapting to new eating behavior. These patients had the added challenge of having to find an alternative means of coping with their negative emotions. Surgery helped some of them recognize when they were eating in response to unpleasant emotions. Eating to safeguard against certain emotions was a coping mechanism that had to be dropped. The struggle to find new ways of coping with negative emotions was reported to be a challenging learning process by these patients.

Developing social skills. Patients' new lives commonly consisted of increased social activity. For those respondents who were unaccustomed to an active social life, they described feeling somewhat unprepared for novel interactions. They reported not knowing how to act in many social situations. This was most common among patients who were in the process of dating after surgery. Many had been obese from adolescence and had not progressed through the adolescent developmental stage of interacting with the opposite sex in a potentially romantic context.

Negotiation of Tension in Multiple Areas

Patient responses suggested an ongoing process of negotiating these life changes to varying degrees. Those who felt that they were successfully negotiating the new challenges before them appeared to experience gains in quality of life commensurate with loss of weight. This may have maintained their motivation to continue losing and strive for their goal weight. On the other hand, patients who felt stymied by the changes effected by the weight loss may have lacked the quality-of-life gains that would justify adherence to such a strict dietary regime. The ability to negotiate successfully these tension-producing changes accompanying weight loss may thus be a primary determinant of long-

term gastric bypass surgery outcome.

Discussion

When patients were provided the opportunity to elaborate freely on their experience of life after gastric bypass, their responses consisted of domains key to their postoperative adjustment and perhaps to long-term outcome. Their detailed accounts added new information and depth to the fragmented picture provided by the existing literature. The grounded theory emanating from the data suggests that the impact of gastric bypass on patients' lives is far more complex than can be captured by existing standardized measures. While quantitative measurements of psychosocial and medical change can be useful, they fall short of accounting for and explaining the changes perceived by patients, as well as the ways in which they do or do not adjust to these changes. An understanding of patient adjustment to post-surgical changes may be crucial to the resolution of difficulty associated with surgical weight loss and maintenance.

Patients reported a multitude of life changes following surgery. Several of these changes were regarded as unequivocally positive, such as increased activities/abilities, reduction of pain and medical conditions, the ability to envision a future, and improved parenting ability and occupational status. If dramatic weight loss results in these unequivocally positive benefits, and if patients are surgically reconstructed in order to physically regain control over their weight, then how do we explain the finding that a significant number of patients do not succeed in reaching goal weight or in maintaining postoperative weight loss?[8-10] Contrary to many popular and researcher assumptions, dramatic weight loss does not result in simple, positive changes exclusively. Many of the post-surgical changes experienced posed difficult challenges that generated tension in patients' lives. These tension-generating changes were classified as either pertaining to self/existential issues, social relations, or skills acquisition. The term tension was utilized to convey the psychological state experienced when various aspects of patients' rebirth or transformation resulted in either some degree of loss or in the challenge of confronting unknown or potentially threatening circumstances. Patients must find some way to cope with these tension-generating changes so that the quality of their life is maintained at what they consider to be an optimal level. If, for example, patients feel increasingly vulnerable as excess weight is lost, this tension must be negotiated until it is overcome or made manageable. The outcome of this negotiation depends on the patients' ability to effectively identify and cope with the changes so that further weight loss is perceived to promise further psychosocial gains. It is altogether likely that some patients might opt to be obese rather than face feelings of fear and vulnerability. Others may decide that the benefits of weight loss outweigh the tension created, determine that their quality of life can only improve with more weight loss, and therefore find ways of actively coping with these emotions. The ultimate goal of weight loss is, after all, the promise of a better life.

The grounded theory of life after gastric bypass surgery that emerged from our data has brought us one step closer to the actual, lived experience of patients following gastric bypass. The need to identify potential challenges in adjusting to life changes following surgery has been conspicuously lacking from previous literature. A valuable next step may be designing future studies that empirically test the present findings and theory, and use this information to develop intervention strategies to improve the likelihood of successful outcome following gastric bypass surgery.

References

1. Bocchieri LE, Meana M, Fisher BL. A review of the psychosocial outcomes of surgery for morbid obesity. J Psychosom Res 2002; 52: 155-65.
2. Dymek MP, le Grange D, Neven K et al. Quality of life and psychosocial adjustment in patients after Roux-en-Y gastric bypass: A brief report. Obes Surg 2001; 11: 32-9.
3. Chamberlain K. Using grounded theory in health psychology: practices, premises and potential. In: Murray M, Chamberlain K, eds. Qualitative Health

Psychology: Theories and Methods. Thousand Oaks, CA: Sage Publications 1999: 183-201.

4. Charmaz K. Grounded Theory. In: Smith J, Harre R, Van Langenhove L, eds. Rethinking Methods in Psychology. London, UK: Sage Publications 1995: 27-49.
5. Glaser BG. Basics of Grounded Theory Analysis: Emergence Versus Forcing. Mill Valley, CA: Sociological Press 1992.
6. Glaser BG, Strauss AL. The Discovery of Grounded Theory: Strategies for Qualitative Research. Chicago, IL: Adeline Publication Co. 1967.
7. Strauss A, Corbin J. Basics of Qualitative Research: Grounded Theory Procedures and Techniques. Newbury Park, CA: Sage Publications 1990.
8. Hsu LK, Benotti PN, Dwyer J et al. Nonsurgical factors that influence the outcome of bariatric surgery: A review. Psychosom Med 1998; 60: 338-46.
9. Powers PS, Perez A, Boyd F et al. Eating pathology before and after bariatric surgery: A prospective study. Int J Eat Disord 1997; 25: 293-300.
10. Shamblin JR, Shamblin WR. Bariatric surgery should be more widely accepted. South Med J 1987; 80: 861-5.

(Received March 25, 2002; accepted May 26, 2002)