Contributions to understand results in gastric band surgery

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Abstract:
Morbid obesity is a chronic disease associated with high morbidity and mortality, and bariatric surgery is the procedure of choice for treatment. This study aims to increase the understanding of the factors that contribute to post surgery success or failure by comparing the pre surgery expectations and the results of treatment one year after adjustable gastric band, in two groups: one with successful results and a second one with failed results.

There were two semi-structured interviews of two candidates for bariatric surgery, immediately before the first operation and the second interview one year after surgery. The interviews were transcribed verbatim and analyzed according to the Grounded Theory procedure.

Before the surgery, realistic expectations and perceptions of the requirements of the process seemed to be fundamental to the commitment to treatment and subsequent success of this intervention. Similarly, post-surgery lifestyle modification and use of appropriate coping strategies are important dimensions associated with success. In cases of failure, the presence of unrealistic expectations about weight loss and lack of awareness of the difficulties and Requirements of the process contribute to patients’ perception of it being a miracle surgery or failure if things did not go according to plan.

The treatment process and expectations about it are central themes in these conversations, although the participants organize these facets in opposing categories. The presence of realistic expectations and awareness of the requirements appear to contribute to the commitment and success of treatment. Failure, in turn, can be associated with lack of commitment that does not allow for the behavior modification necessary for a successful treatment and the expectation that time would miraculously solve the problems of obesity without personal involvement.

These results emphasize the need to rethink part of the process that subjects go through when they undergo bariatric surgery, reinforcing the importance of an evaluation process that includes the subject’s thoughts and expectations about the whole process, constant monitoring, and psychological intervention both pre-and post-surgery.

Key-words: bariatric surgery failure; obesity; qualitative study; success

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Introduction

Obesity is a leading indicator of malnutrition in the Western world. It is a chronic disease in which excess fat accumulates over many years, seriously damaging health and quality of life, and contributing to high morbidity and mortality. It often appears associated with social and physical disability or serious health problems such as diabetes, cardiovascular disease, asthma, cancer or osteoarticular problems, which significantly reduce the quality of life of individuals [1]. In recent years there has been a proliferation of this disease worldwide, and Portugal is no exception to this reality. In 2008, the Directorate General of Health estimated that 15% of the Portuguese population was obese. Analysis of the evolution of this problem found that the prevalence of morbid obesity in adulthood in our country has been increasing dramatically in recent years [1]. This increase represents a set of aggravated risks to health, as well as an increase in early mortality and increased health care costs; an estimated 3.5% of Portuguese health care costs are dedicated to the treatment of obesity and associated co morbidities [1]. Given the multifactor etiology, research has indicated the need for intervention. Bariatric surgery is referred to as a central element in handling such cases. Bariatric surgery embraces all surgical interventions aimed at treatment of morbid obesity.

In this study, we focus on gastric banding, as the procedure was performed in two cases analyzed here. This technique is a reversible restriction and does not alter the normal course of digestion and absorption of food in the digestive tract. Its aim is to decrease food intake capacity. On one hand, the bands are adjustable, which means that the stomach can be adjusted according to the needs of the patient [2]. On the other, surgical complications are uncommon, not endangering the lives of patients. This procedure requires significant changes in eating behavior, with great effort and a fundamental adherence to the process for it to be successful [2]. Although this procedure is usually presented as a solution to obesity, the results are not always those that were expected.

In a recently conducted review of the literature, the success or failure of bariatric surgery is presented as a controversial issue that is not often discussed [3]. Some authors define failure as the inability to significantly lose or gain weight after a significant loss [3,4]. Other authors report that failure happens when there is no weight loss, followed by maintenance of at least 50% of excess weight or there are no improvements in associated co morbidities [5]. Currently, the failure rate of surgery ranges from 10% to 20%, although some authors have pointed out that failure to maintain the weight loss occurs in 35% of cases [5]. The literature emphasizes that a decrease in gains from a successful surgery tends to occur after 24 months [6]. Recent studies suggest even higher rates of failure after surgery. For example, a study by DeMaria[7] noted a failure for 40% of patients within four years of follow-up. Of the 37 patients who had a gastric band put in, there were some cases where there was no significant change in weight. In others, it was necessary to perform a second surgery.

The findings of Ray [9] point in the same direction - when carrying out follow-ups with 243 subjects who underwent gastric banding, a 50% loss of excess weight was used as an indicator of success. The results pointed to a failure of about 40%. Several studies conducted in Europe showed a decrease
in successful surgeries, i.e. the rates of successful follow-up of 1, 2, or 3 years will decrease dramatically [9-11].

Some authors, faced with these results, have pointed to the fact that success depends on the subject's ability to implement permanent changes in lifestyle, such as adhering to a proper eating plan, taking part in regular sport, and adopting appropriate coping strategies to decrease emotional power [12].

The literature has shown that personality traits such as high self-esteem and low rigidity are significant predictors of greater weight loss after surgery [9-11]. On the other hand, impulsivity, neuroticism, dominance and hostility have been identified as factors correlated with lower weight loss after surgery [12,13]. Despite some conflicting results and the need for further studies, there is a consensus among the scientific community that a stricter life-style is a predictor of less weight loss after surgery. With regard to psychopathology, including its prevalence in candidates for bariatric surgery, the data presented in the literature is somewhat mixed. On the one hand, some research has shown that psychopathology is more common in the obese population than in the normal population [14].

On the other hand, several studies point to higher rates of psychopathology in bariatric surgery candidates. A study by Spitzer [15], based on population, states that women who are overweight or obese have increased major depressive disorders and suicide attempts. The results of the Swedish Obese Subjects Study [16] point to the fact that subjects with morbid obesity have a higher risk of more impaired mental functioning than those with moderate obesity. Silva [17] conducted a study of bariatric surgery candidates noting that in this population, the prevalence of psychopathology is 59%. Despite the inconclusive results regarding the prevalence of psychopathology in bariatric surgery candidates, it is important to understand the relationship between psychopathology and success or failure of surgical intervention.

Thus, successful surgery has been associated with an individual’s ability to change their lifestyle and that, in turn, seems to depend on factors such as personality, psychological functioning and eating behavior [11]. In this regard, some studies show that psychopathology is associated with uncontrolled major difficulties in achieving and maintaining weight loss [11]. On the other hand, some studies show that subjects who have low rigidity and a higher self-esteem are better able to lose and maintain weight [11].

With regard to the pathology of food, some literature has shown that the presence of food pathology, including binge eating and emotional eating, are associated with the failure of bariatric surgery. However, other studies found no relationship between eating pathology and postoperative results [11]. One can then conclude that obesity treatment research has produced sufficient results that support a link between the existence of psychopathological conditions and successful or failed surgery. The surgery seems to have a positive effect in the short term psychosocial functioning, but these gains seem to dissipate as the weight loss decreases, especially in cases of severe obesity [14].

The various studies conducted to understand the factors that explain success and failure of treatment have some limitations. For example, Zwaan [14] suggests that many of these studies are based on post-hoc analysis with clear conceptual gaps and low statistical power. On the other hand, there are no studies in the literature seeking to understand, with longitudinal methodology, the evolution of certain factors during pre and post surgery stages that consider, in
particular, the role of beliefs, expectations and personal meanings attributed to the process. It, therefore, is pertinent to understand the non-surgical factors that may contribute to success or failure following bariatric surgery.

This study is part of a broader investigation that seeks to understand the life story of individuals with morbid obesity and the significance of eating behavior and treatment starting from before surgery until one year after its completion. The study presented here aims to understand, from a qualitative analysis of two cases, the factors that contribute to success and failure of banding. In this sense, for this study we selected a successful case and a failed case and compared them one year after surgery.

Method
This study is based on the assumptions of the constructivist paradigm, taking the assumption that reality is multiple and the meanings constructed by the subjects are related to how they deal with life experiences [18,19]. In ontological terms, this perspective assumes that there are several realities that are seized in the form of multiple mental constructions. Consistent with this conceptual model and its objectives, the study reported here is qualitative in nature using the procedures of the Grounded Theory [19].

In a previous study, we analyzed a group of participants who had all underwent bariatric surgery in a hospital in northern Portugal between July 2009 and July 2010. These subjects were evaluated at two different points (M1 - before surgery, M2 - one year after surgery). In this preliminary study, we selected two participants (A and B) as we chose to present two prototype cases (i.e. cases that typify examples found).

Participants

Participant A is a 31-year-old, married mother of three who has completed the 6th grade, works in the service industry. At the second assessment her Body Mass Index (BMI) was 37 kg/m². At the time of surgery, the BMI was 39.4, with no associated medical co morbidities or clinical levels of psychopathology. After surgery, her minimum weight was 89 kg, with a BMI of 33.9. At the time of the second evaluation, the participant was 3 months pregnant and had no medical co morbidities, however, she showed signs of clinical depression.

Participant B is a married 44-year-old, person with two children. The patient has completed the 4th grade and stays at home, having never exercised any professional activity. At the second assessment participant B had a BMI of 27.4, which is the lowest it reached. At the time of surgery their weight was 105 kg, with a BMI of 40, without associated medical co morbidities and showing no psychopathology. In the second examination the participant still did not have any associated medical co morbidities and maintained the absence of psychiatric diagnosis.

Data collection and instruments
Data collection consisted of two semi-structured individual interviews (M1 and M2) of each of the participants. The interview at the time of surgery (M1) focuses on issues related to their life story, history of obesity (although these elements are not presented in this article), previous treatments and the relationship with food. The questions "What was it was like living with the weight gain?", "What is your relationship with food?" and "What do you expect to happen after the surgery?" illustrate the script used in the first part of the evaluation.
One year after surgery (M2), the interview questions dealt with the present time, the current relationship with food and the perception / evaluation of the entire process. The questions “How would you describe your eating habits?”, "So far, do you believe that your initial objectives were achieved?” and "How would you describe this?” illustrate the issues raised in the second stage of evaluation.

**Procedure**

Initially, authorization from the Hospital and the Ethics Commission was requested in order to facilitate the study. Objectives of the study were then explained to the users of the Multidisciplinary Assessment of Surgical Treatment of Obesity objectives and their participation was requested. The interviews were performed after signed informed consent and authorization for the audio recording.

The interviews were transcribed verbatim and analyzed consecutively according to the method of constant comparison provided by Grounded Theory [19]. By following these guidelines, the first step was to perform open coding. The data were analyzed line by line to identify the descriptions of patterns of thought, feelings and actions related to the themes mentioned in the interviews. The units of analysis are semantically close to the emerging discourse of participants. Then we proceeded to the comparison of these units to check the contents to confirm the description and rooting in the data. In the next phase, we proceeded to the constant comparison between categories, between the categories and units of analysis, which allowed the reorganization of the categories on the axes. Finally, there was selective coding, where in the central category was selected, i.e., the phenomenon around which all others have been integrated. In this sense, the selective coding allowed for the integration of all knowledge and the construction of a contextual model that translates.

From the description and categorization of conceptual categorization it was possible to identify relationships between different emerging categories. This analysis allowed the construction of hierarchical broader core categories for the time of surgery (M1) and for the period one year after surgery (M2).

In the previous study, we evaluated 30 candidates for bariatric surgery, and the theoretical saturation of the sample was achieved. That is, interviews were conducted until subsequent interviews did not add anything new to the data already collected [19].

**Results**

Before surgery (M1 – case A and B)

From the start (M1), we chose to present the results together as we got a single model whose categories are distinct but comparable for both cases. Thus, both discourses are organized around the central category of TREATMENT.

**TREATMENT** (Fig. 1) is a central category that summarizes what participants consider to be the main forms used to lose weight. Categories encompassed drugs, behavior modification (lifestyle) and surgery; surgery being the one that developed in the discourse of participants and therefore the most valued and referred to as the most effective way to lose weight (e.g. "... I think that with the diet I am not going there, not even with the drugs, nothing ... with the surgery...then everything will be different" (example of B) “the weight...I was not aware of it, it was out of me ... all diets were wrong, now I am learning and the surgery will be helpful”).

The categories emerge from the surgery decision, reasons for losing weight and construction of meaning, the latter
categories being most valued by participants (e.g. A “I want to have an ideal weight, to move better, to have a better quality of life, I think I will be happier ... I want to be normal, to look normal”, and B, “when I see people on television talking about the gastric band...I only think why not me? The band decreases the appetite and people are skinny. Then I will look in the mirror and see that I am better, I will be walking on the street and no one will be looking at me ”).

The category decision corresponds to the factors that contribute to decision making about the surgery, emerging from the information available, the responsibility for this decision and the power to take it. In both cases analyzed here, these three categories show that who knows, who decides and who has the power are the health professionals (e.g. A "the doctor (endocrinologist) was always saying that I needed to lose weight...", B "Dr. (nutritionist) told me that I needed to lose weight, I was already in consultations for a long time and could not get down. ... and my legs did not help").

The reasons for losing weight category refers to the fact that all the reasons given to lose weight were associated with personal issues such as health, aesthetics, self-esteem or quality of life, or an imposition by outside elements such as health professionals (e.g. A “the doctor said I was very young and with time ... would be much worse”, B "because of my varicose veins, the doctor was always saying that I needed to lose weight and then.... I also like to feel more skillful, to look in the mirror and... feel better. ").

The category meaning the perception that the participants have about the surgery, summarizing the categories: negative perception and positive perception.

The “negative perception” construction meets expectations and” category refers to the fears and difficulties that arise associated with surgery, but are considered of little relevance (e.g. A "I will not be hungry at all ... I will not have any problems", B "I cannot think that it will go wrong, I know it will cost a lot but it should not be that difficult"). The positive perception category, refers to the positive conceptions that are assigned to surgery as an opportunity, a form of rebirth, the beginning of a permanent state of happiness that will bring a range of employment, personal and interpersonal benefits (e.g. A: "I’ll move better, have a better quality of life, feel better about myself and others. Wearing a costume and not have “anything” out. ... sometimes they told me there is a job opportunity and I did not dare to ... go because of my physical appearance "; B “it’s more a matter of image, as people say, it’s more aesthetic").

One year after surgery (M2)

In the second stage of evaluation, the cases described are assumed to represent the contrasting groups, i.e., we have a success story and a case of failure, so we will analyze them separately. During this second stage of evaluation (M2) two main categories were obtained:

**EXPECTATIONS AND TREATMENT.**

**Case A (failure)**

**EXPECTATIONS**
The category “expectations” is a central category in the participant’s speech, summarizing the ideas formulated before surgery about weight loss. The category “unmet expectations” integrates all the aspects that were expected but were not achieved over the past year due to a number of difficulties, motives, and no change (“not yet, not yet ... I’m waiting to see how it is”). The category “difficulties” emerged from not meeting the diet plan and cannot be explained. The category “not meeting the diet plan” understands the difficulties in complying with the guidelines of the health professional due to episodes of binge eating, however, does not justify all the difficulties experienced (“not yet, not yet ... I think I am not ready. It is not easy to accept. [...] One suffers a lot psychologically. It is to chew thinking "I do not want to be eating this, I felt like something else before” ...."and then there are the bad things you eat"). The category does not explain as an absence of reasons that characterize and justify the difficulties overtime (“I do not know ... I cannot explain it ...”).

The category of “reasons” relates to the arguments presented for the previous expectations not being met, such as integrating taking medication, financial problems, pregnancy and insufficient exercise (“the pregnancy has not helped, but more than before, in the monotony of day-to-day, it is much more difficult”).

The “no-change” category characterizes the changes that the participant would have reached, noting weight changes and unaffected image (“It’s not a question of aesthetics, I thought what it would look like to be this skinny, 60 pounds in just days ... then I would look like I never did before, with a little model body... [...] now I’ve settled, I just do not want to increase”).

The category “future changes” refers to changes that the participant expects to achieve in the future, including personal changes, changes in profession, and interpersonal changes. The personal changes characterize the set of changes in the person that meet the ideal image by significant weight loss (“I still need to lose about 30 pounds ...”). The professional changes relate to changes in employment status and / or improvement of current conditions (“I understand why they did not employ fat people, if you could not work well ... so I have to lose weight to get a job better”). The interpersonal changes refer to changes in interpersonal relationships with other people, making them naturally more sociable (“walking in the street and no one would notice because no one is different, other people even like most of us do not look as sloppy ... ... we are” normal “).
then If I could not eat what I wanted then I did not eat. ... I was then filled with ate hunger and greed in ”). The category of “feelings” reflected how participants feel about the eating plan and difficulties, ranging from anxiety / discomfort and guilt for not complying with the plan (“felt sad, disgusted and angry”) to thoughts reporting that the eating plan was uncontrollable, especially with regard to the impossibility of changing this behavior and the fact that the patient was unable to do anything to change this (“I am hungry ... psychological ... just as doing my flat is an empty, empty, empty. And I’m sure I will not eat double, triple or quadruple that plate, so I will continue [...] and I’m nervous, very nervous, shaking, very anxious ”).

The category referred to as “the role exercise plays in the treatment” ("I know I should also do more exercise because it helps you lose weight..."), integrates the categories of type of activity undertaken: planned or unplanned ("I know I could go hiking or even go to the gym "), its frequency ("I should every day, but ..."), and with whom it is performed, in company or alone. ("Sometimes they do not have anyone to go with and it also annoys me").

The “surgery” category characterizes the way this procedure is performed and evaluated by the participant, emerging from a meaningless, negative perception and critical appraisal.

The “meaningless” category reflects the notion that this procedure is not relevant (“I know that surgery is only an aid. ... It all depends on me”). The category describes the negative perception of unfavorable aspects associated with this procedure consisting of the waiting time, process, feelings, problems, strategies, and ineffective surgery. In this category the excessive waiting time refers to the fact that this procedure should be seen as a process. We also report the main difficulties of non-personal change, especially in terms of image and frustration associated with the uncontrollable element of the process in personal terms (“What frustrates me is that I was wrong, was the illusion that everything was going to be so easy”), the persistent feeling of hunger that “forces” me to eat ("I was very hungry psychologically") and the non-occurrence of the expected changes ("everything’s changed but I think it has not").

The most difficult moment came when the diet plan became solid, around the 4th month, when it became more difficult to make the sacrifice and feelings of sadness and anger begin to emerge accompanied by episodes of frustration when the patient has to give into such a strong temptation("from the 4th month on it was very difficult. I started to get hungry, hungry, homesick, it reminded me of things like that").

The category “strategies featuring the procedures used to deal with difficulties as they arise ("sometimes hesitation in
the diet,” "I would clean just, drink water, eat an orange, two biscuits and salt water, sometimes then... the whole package would do everything to help me forget the food ").

A "critical appraisal" category characterizes the set of situations not anticipated by the participant, still highlighting the difficulties, demands and sacrifices associated with this process and the possibility of the ineffectiveness of surgery ("it was not an easy process, I thought there would not be so much of a sacrifice on my part", “it created the illusion of a false miracle that would solve everything. No one cheated me. I thought that it was going to be different. Sometimes I think that this new surgery (the participant is referring to sleeve gastrectomy), if it had been available to me, it would have been more effective for me ").

B (success)

In this case, the term of EXPECTATIONS summarizes two categories: previous expectations and future expectations. The expectations category incorporates all previous ideas that the participants had previously made and were met during this year and includes the previous objectives. The “future expectations” category, which includes what the participant is still expecting for the future, and weight maintenance and aesthetic issues as emerging categories. Weight maintenance refers to expectations that the participant has about their ability to maintain a certain weight in the future and not to gain more, formulating a set of strategies that will contribute to this expectation ("now I want to keep this weight. I know I can eat everything but with care and if I eat more now, I will have to do more exercise ").

The “aesthetic category” refers to the body image that the participant would like to achieve and is closely related to plastic surgery, which is referred to as a key strategy to resolve aesthetic problems and the way to achieve the desired image and body shape. This is also associated with a set of fears and concerns inherent in any surgery ("... now I like to show more of my body. There is still a part that I would change ... but this is more difficult" and "from now on, I know it will be slower [weight loss] but I know what I have to do is to continue to keep it up ").

Treatment is a core category that characterizes the procedures / requirements needed for weight loss. This category includes eating habits, exercise, and surgery, all of which are the three basic pillars for weight loss because they tie lifestyle changes to surgery.

"Eating behavior” is an important category and a key element in treatment because it is precisely where changes in behavior (eating) have to occur for a diet (of healthy foods) to be successful, which can help fuel patients’ positive perception about the changes not only that they can see but about the change in lifestyle behaviors, also. This newfound perception also generates an attitude of greater respect for food, in which all foods are allowed, but it is necessary to distinguish between primary and secondary desires ("I think it is correct, as not all hype. If this is a party, I like to eat one piece of cake and that’s enough. There have been a lot of changes in terms of quantity, much less now, but mainly in terms of quality, more vegetables and salads ").
The “exercise” category understands the importance that this element has in treatment and takes note of the type of activity undertaken, planned or unplanned, frequency, and with whom it is performed: alone or in a group."I also know I need to do some exercise ... even though it is enough just walking home, and every day I walk").

The “surgery” category refers to how the patient experiences surgery, made up of two subcategories: “personal meaning” and “perception and critical appraisal”.

The category “personal meaning” includes the importance attributed to the process by the patient and their experience: In this case, the experience can be defined as a success, a landmark, and a responsibility that requires a personal lifetime commitment ("It was ideal, from here on things started going well ... it's my reward "). This perception includes both the positive and negative aspects that were highlighted by participants as relevant elements, encompassing the categories “positive perception” and “negative perception”. Positive perception encompasses the benefits associated with surgery in the professional, interpersonal, and personal fields (with the changes in health, mobility, self-esteem and aesthetics) as well as feelings of well-being associated with having reached a goal ("It is an enviable quality of life"). The most positive moment is during the first and the second months, when weight loss is most notable ("the first month, I lost a lot of weight"). The negative perception features bodily changes not previously considered, which affect body image, namely the existence of folds and increased tenderness ("I did not even have many folds; the top up is like ... well here is to change the legs").

The category describes critical appraisal and personal assessment that the participant performs throughout the entire process, including a set of expected elements and unexpected elements. The difficulties experienced during the process have to do with the fact that this is a slow process resulting from situations that were not anticipated by the participant ("it is a slow process, I thought it was faster"). On the other hand, the expected results relate to the fact that patients have commuted to these changes and have set their own objectives("the biggest secret is willpower, you get into your head that I really want this and that my success is up to me ").

Discussion

Bariatric surgery has been reported as the preferred method to treat obesity, but increasingly it is recognized that setbacks are not uncommon and they are often attributed to psychological factors rather than technical factors [20]. A lack of understanding of the factors associated with success or failure in bariatric surgery has been suggested as a major limitation associated with this procedure. Understanding this knowledge is crucial if we want to improve the effectiveness of intervention and it is important to understand what factors are associated and/or predictors of success and failure of treatment. This study aimed to understand, from a qualitative analysis of two cases, the factors that contribute to success and failure of banding. Thus, it is intended to contribute to a better understanding of the processes and subjective experiences that are present in the case of both success and failure.
The data obtained allows us to identify patterns and meanings in relation to existing expectations before surgery, as well as the meaning given to treatment one year after its completion. These data should be taken into account with respect to this issue.

At the moment before surgery, the treatment is a central category in the discourse of participants. This category includes, in both cases, the need to produce changes in the lifestyle, the use of drugs, and surgical treatment of the patient. However, surgery is considered "the" treatment. Participants perceive this process as something external to themselves. Food controls their behaviors and they do not feel able to control their own eating behavior. We found the same principle relates to surgery. The way to solve the problem of obesity is by performing a surgical procedure, something that "somebody will do from here and all problems would be solved." Thus, we note the presence of an external locus of control, either by the power given to food or by the way they want to understand the surgery and all associated procedures. Our data indicate, as has been reported in the literature, a greater vulnerability to external factors and a propensity for idealization of surgery and the association of food with different emotional states [20].

One year after surgery, two core categories emerge in these speeches, the "treatment" and "expectations." The way participants understand and categorize this reality is similar; however, they put themselves at opposite sides. As has been noted by van Hout [11], individual differences can affect the success of bariatric surgery. Thus, treatment must include changes in lifestyle (diet and physical exercise) as well as surgery, and these figures are consistent with those reported in the literature [20].

In the case of failure, all treatment is perceived as negative, a process that is enforced, and requires a great sacrifice that the participants do not always feel able to meet the demands of. Surgery is a "type" of privileged treatment and it is now perceived as a miracle, in which the participant is subject to a number of medical and surgical procedures that will eliminate all their problems. All the experiences associated with this operation have been idealized, and participants do not appear aware of the difficulties in the discourse and process requirements. A greater commitment to behavioral change is needed for the purposes of weight loss and reduction of associated medical comorbidities. Thus, the participant’s expectation that prevailed after surgery was that it would be different, with no great elaboration, understanding or commitment. The surgery was considered a miracle, a magical moment that would change their life and therefore was wrapped in a set of unrealistic expectations. The lack of awareness of the difficulties meant that the participant had not developed strategies, mechanisms and an action plan that would allow them to deal with difficulties after surgery and to understand and accept that this would be a slow process.

With regard to "expectations" about the future, there are a number of objectives that have not yet occurred, and the participant continues to seek external explanations to justify these changes. They did not identify a number of difficulties that they did not expect throughout the process. This discourse is marked by an external locus of control; the food takes a central role against which the participant feels unable to have the power to decide. The participant displays passive behavior and does not take responsibility in the situation, saying that it "is stronger than me." The participant acknowledges that the treatment includes dietary changes,
exercise, and surgery, but the latter is more valued than the previous two. Therefore, after one year, surgery is perceived negatively as a result of the difficulties, demands and failure that occurred. On the other hand, there is hope for a solution and a new desire for a different type of surgery that may resolve the situation. Therefore, there is the expectation and desire for a new surgery that would solve all their problems. It seems to be an idealization of the "new miracle" that would achieve all the changes that heretofore have not been met. This can be conceptualized as a case of failure, to the extent that the loss of excess weight was not attained, but also because the participant, even in the face of difficulties, did not learn or develop appropriate strategies and was not proactive enough to enable themselves to adequately deal with the situation and reach their goals, continuing with the expectation that something or someone, that we here call a "miracle", will solve the problems of their life [11].

In turn, in case B, before surgery, there were a set of expectations very similar to participant A’s, but a year later we find that the objectives were largely achieved. The proactive role of the participant, the perception that there are several dimensions to the treatment and that this is a long process, enabled him to achieve his goals, and so it is was a success. In this situation, we find a greater commitment to the changes in lifestyle, whether in food or in physical exercise, the centrality of the personal role, and the need to commit to these changes. The success of the process focuses on the learning acquired, which enabled the participant to change their lifestyle and maintain these changes [16].

Thus, we conclude that expectations about treatment and the role of fat in the process are fundamental to commitment to behavioral modifications necessary for this process to be successful. On the one hand, it is essential to be adequately prepared for surgery and, on the other hand, systematic monitoring is needed after surgery, not affecting the obese with treatment and developing proactive strategies to enable the patient to achieve and maintain therapeutic success.

Data from this study emphasizes the need of different aspects to be worked on throughout the weight loss process as well as to promote alternative strategies that can be implemented over time. Moreover, it is important to develop mechanisms appropriate for different stages of the process, as well as to adjust the expectations of all the stakeholders. However, despite some of the factors that contribute to the success or failure of bariatric surgery being better understood, we must point out some limitations of our study. The participants, although they had undergone the same treatment, had a different record relating to previous attempts at weight loss and one of the participants already had a relevant medical condition associated with their obesity. Furthermore, during the follow-up year, one of the participants became pregnant, an experience that may have distorted their adherence to treatment.

Despite the limitations, this study suggests the importance of understanding how the obese react to different experiences associated with gastric band surgery and how they integrate it in their life story and its treatment. It would therefore be important to conduct similar studies with other surgical techniques in order to understand if these dimensions apply only to the gastric band surgery. This study also reinforces the importance of the proactive role of the patient, and yet another research challenge is to analyze the factors that influence this individual empowerment.

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