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ORIGINAL ARTICLE/ARTICLE ORIGINAL

Transforming with partner patients a program of preparation for bariatric surgery

Florence Somers[1,*], Jorge Correia[1], Valérie Blyweert[1], Minoa Jung[2], Zoltan Pataky[1] and Alain Golay[1]

[1] Unit of patient education, Division of endocrinology, diabetology, nutrition and patient education, WHO Collaborating Center, Department of médicine, Geneva University Hospitals, Geneva, Switzerland
[2] Division of Visceral Surgery, Surgery Department, Geneva University Hospitals, Geneva, Switzerland

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Abstract – Introduction: The current collective preparation program for obesity surgery is performed by an interdisciplinary team over four non-consecutive days. In order to optimize the delays of the program and to improve the educational offer a temporal condensation of this service in the proximity of the intervention was decided. The objective of this study is to describe the creation process of the new obesity surgery preparation program based on the needs of partner patients. **Materials and methods:** We conducted semi-structured focus groups with 50 patients over 3 successive stages of the surgical journey: at the beginning and end of the collective preparation and then 2 to 14 months after the surgery. The analysis crosses by theme the needs identified. **Results and discussion:** Our study allowed to authenticate a central need of sharing with witnesses, a need for information (medical, dietary, behavioral), and a need for longer-term projection (transformations, investment axes to support weight loss). **Conclusion:** The preparatory needs identified by the partner patients served as a guide for the transformation of the existing program. This experiment paves the way for a partnership with patients established and recognized by the institution of care in the evaluation process of this program.

Key words: bariatric surgery / therapeutic patient education / preparation of patients before bariatric surgery / partner patient

Résumé – Transformer avec des patients partenaires un programme de préparation à la chirurgie bariatrique. Introduction : L'actuel programme de préparation collective à la chirurgie bariatrique est réalisé par une équipe interdisciplinaire sur quatre journées non consécutives. Afin d'optimiser les délais du parcours et d'améliorer l'offre éducative, il est décidé une condensation temporelle du programme à proximité de la chirurgie. L'objectif de cette étude est de décrire le processus de création du nouveau programme à partir des besoins de patients partenaires. **Matériels et méthodes :** Nous avons conduit des groupes de discussion semi-dirigés avec 50 patients sur 3 temps successifs du parcours chirurgie : en début et fin de la préparation collective, puis à 2 à 14 mois après la chirurgie. L'analyse croise par thématiques les besoins identifiés. **Résultats et discussion :** Notre étude a permis d'authentifier un besoin central de partage avec des témoins, un besoin fondateur d'informations (médicales, diététiques, comportementales), et un besoin de projection à plus long terme (transformations, axes d'investissement pour soutenir la perte pondérale). **Conclusion :** Les besoins préparatoires identifiés par les patients partenaires ont servi de guide à la transformation du programme existant. Cette expérimentation ouvre la voie à un partenariat avec les patients établi et reconnu par l'institution de soins dans la démarche évaluative de ce programme.

Mots clés : chirurgie bariatrique / enseignement thérapeutique du patient / préparation avant chirurgie bariatrique / patient partenaire

*Corresponding author: Florence.Somers@hcuge.ch

1 Introduction

For 10 years, bariatric surgery has emerged as a new and effective strategy for the management of severe obesity, refractory to the conservative approach [1–3]. This surgical intervention requires an informed choice. This should be in line with patient abilities to behavioral changes in the post-surgery period and in long term, which are the subject of specific recommendations by the European Association for the Study of Obesity (EASO) [4]. For patients, therapeutic preparation programs improve the awareness of behavioral changes challenge, anxiety score, depression and eating disorders due to psychological preparation, thanks to medium term weight loss [5–7]. Furthermore, combined preoperational information and sensory information are the clinical strategies which give the most benefits for patients in preparatory process [8]. In this context, preoperative preparation for bariatric surgery is part of the certification guidelines by senior health authorities of internationally qualified surgical centers [9–11]. The modalities of this preparation, in addition to the intervention of an interdisciplinary team, are left to the discretion of each center with varying modalities and intentions [12]. The sharing by teams of the development process and the contents of existing educational programs represents an opportunity to learn and thus improve professional practices [13].

In the Geneva University Hospitals (HUG), the Unit of patient education, Division of endocrinology, diabetology, nutrition and patient education, ensures the delivery of the current preparation program with the intervention of an interprofessional team associating doctors, nurses, dieticians, psychologists, art therapist, all trained in Therapeutic Patient Education (TPE). The educational program takes place over 4 non-consecutive days in an interval of 4 to 10 weeks. They are focused on the different management axes: medical, dietary, behavioral and physical activity. The learning model used is collaborative (by mobilizing collective and experiential knowledge), experimental and formative. This preparatory cycle is integrated into the surgical path. This group preparation program (groups of 8 to 15 patients) is complementary to an individual follow-up validating the eligibility criteria for bariatric surgery according to the criteria of the Swiss Society for the Study of Morbid Obesity and Metabolic Disorders (SMOB) [10].

After 6 years of the current 4-day version of the preparatory program for bariatric surgery, based on analyses and mutual decision within the surgery department, coordinator of the care pathway, and unit of patient education, it was decided to condense in its temporality in the form of 3 days preceding the surgical intervention of 1 to 2 months. The idea is to increase the educational offer to optimize the care pathway in correlation with the increasing number of patients eligible for the bariatric surgery in our center (100 to 120 bypass per year) and to improve the post-surgery outcomes.

Exploring the needs of patients is central to the design or re-evaluation of a therapeutic education program. The Patient constitutes a legitimate partner for the care teams involved in this process at the crossroads of both experiential and scientific knowledge, emotional and rational intelligences, efficiency logics and appropriation logics, as the underpinning Montreal Model [14–16]. This relationship model between patients, like a cares' actor, and caregivers exceeds the care and concerns education and research. The intention of this collaboration is to improve the quality of care offered (criterion quality) closer to the needs of patients in their daily lives and aims to improve the health of patients with chronic diseases (including quality of life) through empowerment.

The objective of this study is to describe the creation process of the new obesity surgery preparation program based on the needs identified by patient-partners.

2 Materials and methods

We conducted a monocentric qualitative analysis that explored by theme the needs of 50 patients at 3 successive stages of the bariatric surgery program: at the beginning of the collective preparation (A), at the end of the collective preparation (B), and 2 to 14 months after surgery (C) (Fig. 1).

The groups consisted of 36 women and 14 men with a median age of 45 years (min: 28, max: 63, SD: 3.5).

The data was collected from 7 semi-structured focus groups of 4 consecutive preparatory cycles (time (A), (B)) and 1 separate focus group of 11 patients who have already benefited from surgical management (time (C)).

39 different patients participated at time (A) and/or (B) and 31/39 patients in 2 times (A) and (B). The data of all semi-structured groups was collected from April to September 2018.

The needs reported at the time (A) were collected from the welcome session with the question "What I come looking for in this preparatory program for bariatric surgery". Expectations are discussed in pairs of patients, returned to the group and organized as a metaplan in chronological order of response within the program.

The exploration of the needs of patients at the time (B) was carried out in the form of brainstorming during an evaluation workshop at the end of the preparation around the questioning "What helped me or would have helped me to feel ready for my obesity surgery?".

11 patients (8 women, 3 men with a median age of 45 years, SD: 10.6) at time (C) underwent gastric bypass with a surgical follow-up of 2 to 14 months (median of 6 months). Their needs were explored as a focus group facilitated by 6 professionals from our team. The patients were brought to immerse themselves in the period of preparation to today. They were led to express their experience of this period around the following questions: "What was useful to you? What helped you? What improvements could you suggest?".

3 Results

The preoperative needs collected can be divided into 2 main categories:

- permanent needs, shared by patients both preoperatively and postoperatively;
- posteriori needs, mentioned only by the group of patients who have already benefited from bariatric surgery (Tab. 1).

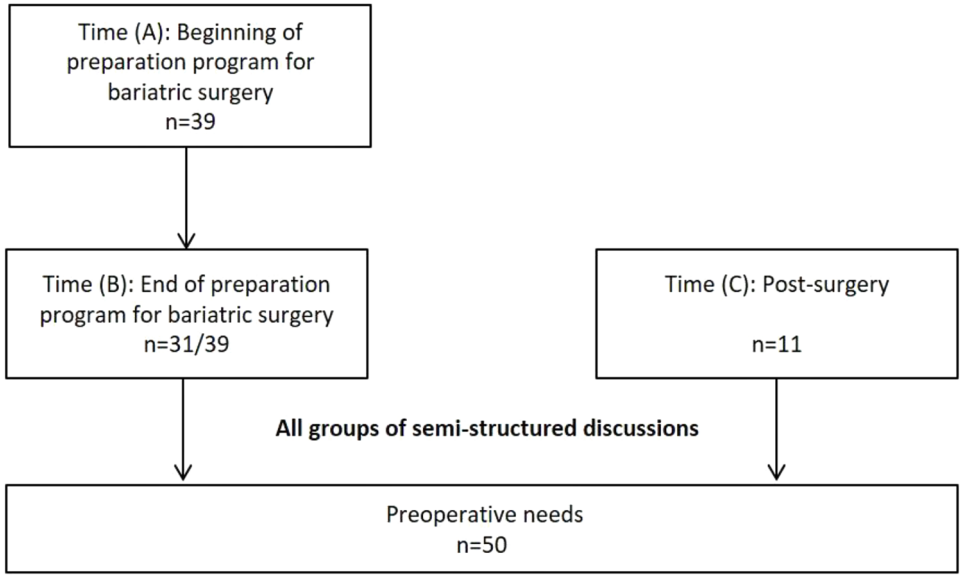

Fig. 1. Diagram of exploration of the needs of patients before obesity surgery.
Fig. 1. *Diagramme d'exploration des besoins préopératoires des patients avant chirurgie de l'obésité.*

Table 1. Preparatory needs before surgery for obesity (permanent needs identified in pre- and postoperative time (A) and/or (B) and (C), posteriori needs identified only postoperatively at the time (C)).
Tableau 1. *Besoins préparatoires avant chirurgie de l'obésité (besoins « permanents » identifiés en pré- et postopératoire au temps (A) et/ou (B) et (C), besoins « à postériori » identifiés uniquement en postopératoires au temps (C)).*

Permanent needs (group A, B, C)	Posteriori needs (group C)
Testimony of a peer patient, sharing between patients	Reflection on postoperative weight maintenance
Information (dietetic, medical, behavioral)	Support for physical activity
Identification of the surgical path, of the Care Network	
Exploration of individual consent	
Exploration of transformations	
Family welcome time	

Concerning these permanent preoperative needs, the groups of the times (B) and (C) give a central place to the need to share with a witness who has already benefited from an obesity surgery and more largely to the need for sharing between patients. Groups of time (A) do not cite this need until they have experienced it. The second emblematic need concerns the need for information, about medical, dietary or behavioral. It is present on the 3 times explored of the surgical path pre- and postoperative and for all groups with a predominance for time (A). 4/8 groups (time (B) and (C)) express a need to identify the stages of their surgical journey and a need to identify the different health actors' resources of their care network. Talking about their individual consent (with the use: "path term") is a need also reported by all time groups (B) and (C) and includes for a group about the anticipated directives for the management of the operating period ("instructions in case of surgical problem" for example). The need for projection as to personal (bodily, psychological) and interpersonal transformations concerns 7/8 groups. This verbatim could illustrate the patients' questioning: "How do you accept your body after surgery?", "I will not imagine me like a skin people", "What about personality changes?", "How do you work the social relationship after surgery?".

4/8 groups (3 times represented) evoke the need to include the family in the preparatory process.

Some needs about how to be ready for bariatric surgery have been identified only by the group of patients who have already benefited from bariatric surgery through the development of experiential knowledge. This group formulates the preparatory need for a meta-analytic view of the different ways to invest for longer-term postoperative weight maintenance, including support for physical activity.

The patients' needs identified have been crossed with those of the caregivers to mobilize, in the sense of "actor", patients in their project of bariatric surgery. The results were presented by the project's working group to the entire care team. At the end, interprofessional working sub-groups were formed around these 5 themes according to the different axes of obesity treatment (diet, psychology, physical activity and medical aspects): dietetics, medical information, testimony, body and transformations, transversality (network, pathways, and weight maintenance after surgery). Other themes, namely physical

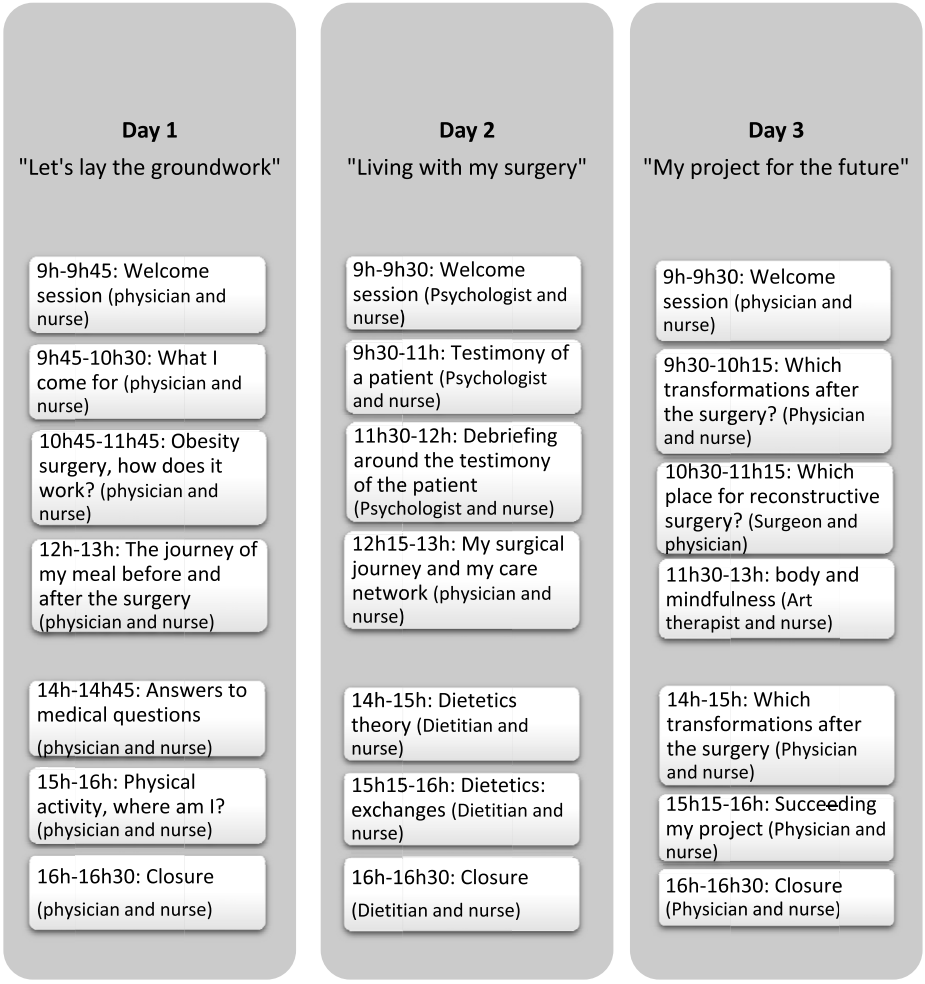

Fig. 2. Finalized framework of the 3-day obesity surgery preparation program entitled "Obesity Surgery: Succeeding My Project".
Fig. 2. *Trame finalisée en équipe du programme de préparation à la chirurgie de l'obésité sur 3 jours intitulé « Chirurgie de l'obésité : réussir mon projet ».*

activity and the surgical procedure, have not been changed. The mission of these subgroups was to set up educational workshops relaying the key messages of preparation for bariatric surgery and secondary adaptations, in line with recognized needs.

The constructed framework was validated at a final full team meeting prior to the operational phase (Fig. 2). The first day lays the foundation for the medical understanding of the surgery. The second day which is central, is built around the testimony complementary to a video about witness in the first day, and dietary workshops in practical considerations of everyday life, articulated by a workshop of identification of the course of care and supporting network. The third day projects towards bodily, psychological and interpersonal transformations. It ends with a summary of all key messages reinvested by patients in small concrete projects at different pre- or postoperative times. From the exploitation of patients' needs, new workshops have been created: "My surgical journey and my care network", "succeeding my project". A need identified was not addressed: the reception of families. Human and temporal resources have been the limiting factor for the integration of this unobstructed need and will be reconsidered in the evaluation process.

4 Discussion

The strength of this work is centered on the needs of patients without obscuring the expertise of health professionals, a strategy that has also been developed by other teams specifically for patients who have already been operated. Our results are in alignment with other similar studies, highlighting most notably the challenge of post-operatory weight maintenance, the importance of physical activity and the projection regarding the physical, psychological and social transformations induced by this procedure, among other challenges [17,18]. The acknowledgement of these needs is an opportunity to standardize professional practices regarding preparation programs to bariatric surgery. Basing the therapeutic preparation programs upon the patients' needs also allows to take into account the patients psycho-social disparities and therefore improve their adherence to the program [19].

Furthermore, this consultative collaboration for the development of a therapeutic education program by a care team may constitute the first step towards the creation of a partnership [14]. This correspondence between identified needs and proposed workshops reinforces the legitimacy of the

proposed treatment and the mobilization capacity of the patients involved in this preparatory course. In her review of the literature on how to manage obesity, including bariatric surgery, Jennie Echols identifies, among other things, the participants' commitment and collaboration in caring for their care [20]. One of the 6 levers for improving health services recognized by the Canadian Foundation for the Improvement of Health Services is this mobilization of the patient and the citizen [16]. Building a program from partner patient consultation also reinforces the relevance of the key messages, as illustrated by the contribution of the Focus Group (C) and the need for an overall vision of the key messages for the patient in maintaining weight away from surgery.

The limits of the study are related to the temporal constraints related to an imperative to have an operational program in January 2019, 6 months from the beginning of the constitution of the working group in charge of the project of transformation of the existing program. Another limit may arise from the shortness of the post-operative time (range: 2 to 14 months, mean: 6 months) for the exploration of needs of group (C) comparatively to other similar studies (range: 7 months to 144 months for one study, mean: 42 months for other one) that can influence the recognized needs [17,18]. In addition, the method of consultative collaboration of patients more than co-construction mitigates the effects of legitimacy, commitment of patients described above.

5 Conclusion

Relying on the perceived needs of patients at different pre- and postoperative times of bariatric surgery can guide the transformation of a preparation program by a care team specializing in obesity and therapeutic patient education. This consultative approach targets the key messages relevant to patients in the preparatory phase without obscuring the expertise of the health care team with a mobilizing intention and paves the way for a more engaged partnership.

Conflicts of interest. The authors declare that they have no conflicts of interest in relation to this article.

Abbreviations

EASO	European Association for the Study of Obesity
HUG	Hôpitaux Universitaires de Genève
SMOB	Swiss Study Group for Morbid Obesity and Metabolic Disorders
TPE	Therapeutic Patient Education

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