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Qualitative study on postbariatric surgery follow-up in France: a new patient–physician relationship

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ABSTRACT

Background Most studies on bariatric patients to date have only examined mortality and morbidities in terms of surgery or no surgery. Few have investigated loss to follow-up in post-surgery patients.

Purpose This study aimed to describe the dynamics behind non-adherence to follow-up in bariatric patients postsurgery.

Design Using semi-structured interviews, we performed a qualitative study. Using a thematic analysis, we described themes involved in patient adherence to postsurgery follow-up.

Setting Participants were recruited from a university hospital near Paris and via social networks.

Participants 17 patients who had undergone surgery, some of whom were lost to follow-up, 15 women and 2 men, were interviewed, during a mean time of 90 min. 10 were adherent, and 7 were lost to follow-up.

Results Follow-up was seen as a support in which the care provider–patient relationship can act on the four following themes: (1) regaining control, (2) knowledge acquisition, (3) management of fears and (4) overall restructuring of one's life postsurgery.

Conclusions Patients' experiences and representations of postsurgery follow-up should be documented in detail in order to define the specific roles of the various care providers offering support to this population, and to strengthen the coordination of care pathways between these actors. In addition, improving the quality of communication could improve adherence to follow-up after bariatric surgery.

STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ A qualitative approach was used to explore reasons for adherence to postbariatric surgery follow-up in a specialist centre and with the general physician, or explanations for being lost to follow-up.
⇒ Two researchers performed an independent coding of initial transcripts, and emergent themes were discussed with other researchers.
⇒ Rich and varied data collected in the interviews and a constructivist patient-centred approach could improve understanding of the care provider–patient relationships and suggest different approaches to increase follow-up adherence.
⇒ As the interview guide was intentionally broad, and patients were encouraged to express themselves very freely, some data may not have been collected, particularly regarding organisation and actual adherence to follow-up.
⇒ The findings may be specific to our study population, which was recruited either from our tertiary hospital or through social networks—the latter likely selecting individuals with higher levels of professional background, health literacy and digital literacy.

INTRODUCTION

Bariatric surgery is the most effective treatment for obesity, resulting in the greatest and most sustained weight loss, as well as significant improvement or resolution of obesity-related comorbidities.[1] Patient adherence to postsurgery follow-up is essential to ensure best results.[2 3] In France, national recommendations indicate that each patient should have four follow-up appointments during the first year after surgery in a bariatric specialist centre, followed by one or two appointments during the second year. These appointments must be jointly organised by the centre and the patient's general practitioner (GP).[4] A number of international research establishments, institutes and societies have published quite similar recommendations,[5–7] with 3–8 consultations during the first year and fewer during the second year.

Many patients face challenges in attending follow-up appointments after bariatric surgery, with studies reporting that between 3% and 63% experience difficulties with adequate follow-up in specialist centres.[8 9] Each study had its own definition of what constitutes adequate adherence in terms of the number of visits, time frame and type of professional consulted. Less than 3% of 1136 studies on bariatric surgery follow-up had data at 2 years of follow-up for more than 80% of their cohort.[9] In the Swedish Obese Subjects study of 4047 patients, the

first year postsurgery follow-up adherence rate was very high at 99%, but then decreased in the second (87.1%) and subsequent years (32% at 15 years).[10] In France, 53% of patients did not adhere to the specialist centre's follow-up protocol, and 18% were lost to follow-up at 2 years.[11]

Optimum postbariatric surgical follow-up care encompasses the input of a specialist multidisciplinary team. Each patient should be informed about the postsurgical follow-up in terms of frequency of appointments, type of caregiver for each consultation, organisational aspects.[12] However, such organisation is not the reality everywhere. Patients frequently express challenges in scheduling appointments, along with experiencing organisational dysfunction beyond their control.[13 14]

In some studies, other factors positively associated with adherence to postsurgery follow-up are advancing age,[8 13 15] being single, and being employed,[15] and the type of surgery (better adherence in persons who had a sleeve gastrectomy or bypass vs a gastric band).[14] Inversely, factors associated with loss to follow-up include the distance from the specialist centre,[13 14 16] a higher body mass index before surgery, being married, psychological factors, [12] unemployment, rheumatoid comorbidities[12] and a lack of health insurance.[13 15] In Spain, the first three reasons quoted by lost-to-follow-up patients (n=33) were work (36.4%), family-related problems (18.2%) and geographical distance (15.2%).[13]

Some qualitative studies have explored patients' experiences and feelings of bariatric surgery,[17 18] but few have focused on follow-up.[19 20] The concept of being lost to follow-up is specific to a patient-given context, and specifically, bariatric surgery induces a changing health status and the clinical state event (demand for surgery) disappears with the intervention.[21]

Knowledge of the factors influencing adherence to postbariatric surgery follow-up is still insufficient. Specialist centres should consider investigating their own follow-up factors.

This study aimed to better clarify the processes determining the level of bariatric patient adherence to postsurgery follow-up provided by specialist centres (ie, short term) or by GP (ie, long term).

PATIENTS AND METHODS

Methodological approach

The main objective of this study was to document experiences and representations of postsurgery follow-up in a sample of bariatric patients, some of whom were participating in follow-up and some who were not. The two inclusion criteria were: (1) a bariatric patient who had been operated on more than 6 months ago, irrespective of the type of intervention and (2) participants who had provided informed consent to take part in the study. The exclusion criteria were patients who refused to be recorded during the interview.

Study design

Theoretical framework

We used a constructivist approach which acknowledges that reality is socially constructed. The analysis is based on the principle of reciprocity between the interviewer and the interviewee, allowing the latter to shape and actively influence the interview. Such an approach is useful to understand multiple perspectives.

Participant recruitment

An inductive sampling strategy with maximum variation was used to address participants' (ie, adherent and non-adherent patients) experiences and representations of follow-up adherence, with the aim of further nourishing the theoretical development. The size of the sample was defined after reaching data saturation; the latter was defined as the point when no new information was garnered from interviews which could enhance the theoretical development. A minimum of ten interviews was decided a priori.

Initially (first wave), we recruited patients from our database (patients operated on between 1 January 2011 and 31 December 2013) patients. They were regarded as non-adherent if they attended fewer than three follow-up appointments during a 3-year period following the surgery. This definition of lack of adherence to follow-up was determined arbitrarily but depends on the follow-up protocol established by our centre (six appointments during the 3 years following surgery).[12] As this process reached too few participants, we conducted a second wave of recruitment using general announcements and social media focusing on postsurgery follow-up of bariatric patients, and a 'snowball' effect. In this second wave, the participants defined themselves as adherent or not, as our centre definition of non-adherence may not be appropriate, for example, when patients have been operated on by a team who did not have a planned follow-up protocol or with a follow-up <3 years since surgery.

Setting

The study's interviews were conducted face to face between September 2018 and January 2020. The participant could choose the interview location (public building, coffee shop, home, phone, etc), the only condition being that the interview had to take place in a quiet setting. One researcher (DH) (male, caucasian, normal weight, less than 30 years old, GP) conducted the interviews after a short training period on interviewing and 6 months of experience in our unit.

Data collection

A qualitative, open-ended question approach was used. The interview guide (see online supplemental material) served as support; the interviewer could ask reworded questions to clarify certain questions and probing questions to investigate points not spontaneously developed (ie, the involvement of each professional (surgeon, physician, dietitian and psychologist) in the follow-up process).

Silences were respected to give interviewees the necessary time to express their thoughts. The issue of follow-up was not raised directly to avoid possible question-induced criticism and answers biased by social desirability.

The main items in the interview guide concerned: (1) participants' personal history leading to the bariatric surgical intervention; (2) their experience of the medical pathway (ie, the surgical intervention and postsurgery follow-up); (3) their experience, expectations and representations relating to inpatient and outpatient medical monitoring; (4) the nature of follow-up appointments and the stakeholders involved (eg, dietician, psychologist, a professional physical fitness coach) and (5) the role and place they gave to their GP.

For each interview, the following declarative data were collected: age, sex, occupation, familial status, children, year of intervention, type of intervention, weight, height and body mass index before and after the intervention. We did not systematically collect information on the type of health coverage as this was not the focus of our research. In France, most individuals benefit from health coverage provided by the national health insurance (Assurance Maladie), which reimburses about 70% of healthcare costs, and this is most often supplemented by private insurance that covers the remaining 30% fees.

All the interviews were performed using a Dictaphone and transcribed verbatim. Each interview was anonymised. The analysis was performed using the original French transcript. The quotes presented here are our translations of some elements of the transcripts.

Analysis

Data were viewed through a constructivist paradigm. We chose to perform a thematic analysis.[22] Using NVivo (V.12), the transcripts were independently coded by two researchers (DH and HB). They performed the following steps, with a back-and-forth process between the verbatim and the analysis: (1) familiarisation with collected data by reading, re-reading and summarising the interview transcripts; (2) performing open coding to generate the initial codes; with constant comparison, which creates a permanent interaction; (3) performing structured coding to identify themes, subthemes and connections, emerging from the data; (4) back and forth exploration between the discursive material and the still emerging analysis, without performing triangulation and (5) production of a report. Notes were taken during the analysis of the transcripts. For this research, only discourses that referred to the type of postsurgery follow-up received and/or the reasons for non-adherence to follow-up were retained. Each theme and subtheme was illustrated with participants' quotes. Finally, we proposed a new model to assess characteristics of follow-up. We did not ask participants to comment on transcripts or to give their feedback on the findings.

Table 1 Characteristics of participants

Participant	Sex	Age class	Marital status	Employment status	Contact via social network	Type of surgery	Delay (years)	Follow-up adherence
P1	Female	≥50	Married	Unemployed	Yes	SG	5	None
P2	Female	40–49	Divorced	Nurse	Yes	RYGB	8	None
P3	Female	40–49	Single	Educator	Yes	SG	1	Yes
P4	Female	40–49	Married	Manager	No	SG	2	Yes
P5	Female	<30	Cohabitation	Student	No	SG	5	None
P6	Female	≥50	Married	Wet Nurse	No	SG	2	Yes
P7	Female	30–39	Single	Assistant	Yes	RYGB	1	Yes
P8	Male	<30	Single	Student	Yes	SG	2	None
P9	Male	40–49	Married	Consulting	Yes	RYGB	13	Yes
P10	Female	<30	Single	Nurse assistant	Yes	SG	2	Yes
P11	Female	≥50	Married	Retired	Yes	SG+RYGB	5	Yes
P12	Female	<30	Cohabitation	Hairdresser	Yes	GB	6	Yes
P13	Female	>50	Married	Assistant	Yes	SG+RYGB	15	Yes
P14	Female	<30	Cohabitation	Temp Worker	Yes	SG	1	Yes
P15	Female	30–39	Single	Unemployed	Yes	GB+SG+ SADI-S	7	None
P16	Female	40–49	Married	Chief	Yes	SG	3	None
P17	Female	30–39	Single	Manager	No	SG	6	None

Delay is the time between the surgery and the interview, in years.
GB, gastric bypass; RYGB, Roux-en-Y Gastric Bypass; SADI-S, Single Anastomosis Duodeno-Ileal Bypass; SG, sleeve gastrectomy.

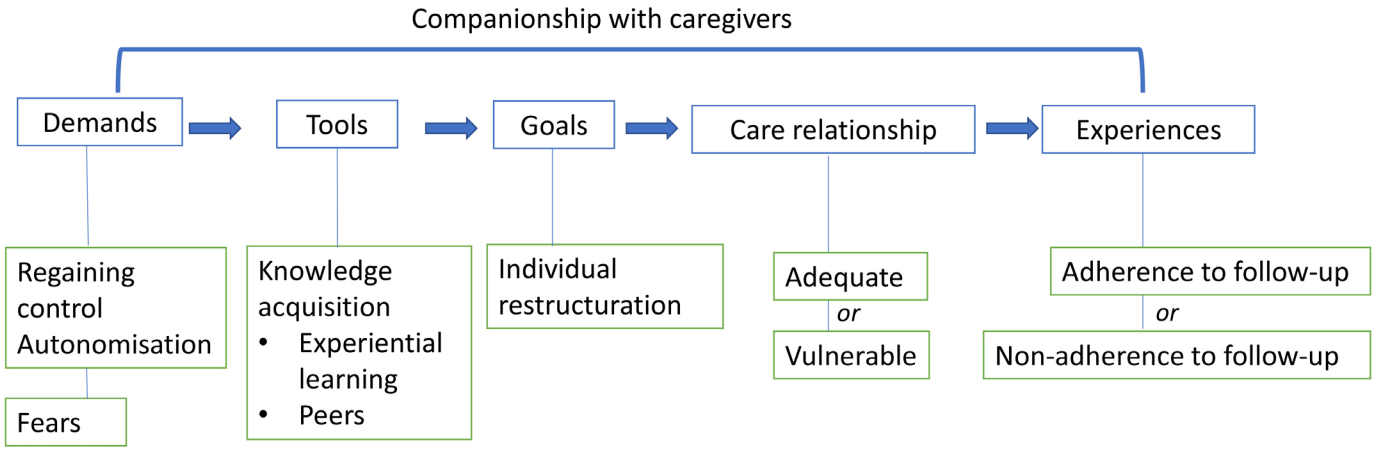

Figure 1 Framework of postbariatric surgery follow-up.

Patient and public involvement

No patients were involved in the design of the research. We plan to disseminate the study results to participants.

RESULTS

We conducted 17 interviews with 15 women and 2 men; average age was 35.4 years. 10 had adequate follow-up adherence (2 recruited in our centre, 8 via social network), whereas 7 were not currently being followed (2 recruited in our centre, 5 via social network). Most participants were recruited on the internet (table 1). No person we solicited refused to participate. Interviews lasted 90 min on average. All 17 participants had been operated on between 2004 and 2009, 12 patients had a sleeve gastrectomy, 5 a by-pass, 3 a gastric band and 1 a (Single Anastomosis Duodeno-Ileal Bypass). Therefore, four respondents were operated on twice during the study period.

The qualitative analysis of the interview discourses revealed the following four themes in terms of participants' experiences and representations of postsurgery follow-up as a support tool: (1) regaining control, (2) knowledge acquisition, (3) management of fear and (4) overall restructuring of one's life postsurgery which contrasted with one's previous life with obesity (figure 1, table 2). Each of these themes represents a step in the postsurgery period, and each step is sensitive to the relationship with the follow-up healthcare team (table 3). Accordingly, dysfunction in this relationship can cause poor adherence or loss to follow-up.

We will discuss the participants together, whether or not they adhere to the follow-up.

Regaining control

Regaining control was the basis of patient empowerment. The experience of obesity is described as a long path (psychological (with daily love-hate struggle with food) and physical failure) with many obstacles. It was perceived as a loss of control rooted in their individual life history. Thus, participants considered that surgical intervention was a last resort, in the absence of alternative possibilities. Moreover, some perceived the care pathway as a purely administrative (ie, not care-based) process. This was one source of incomprehension, especially when they were informed that the surgical team might not give the go-ahead for surgery (table 2).

After surgery, patients felt victorious. They regained control over their food intake and over their weight. They were released from the feeling of persistent hunger, and experienced positive emotions. Two patients (P4, P17) explicitly expressed the importance of keeping care providers at a distance and steering clear of their medical instructions. While recognising the interest of follow-up, they prefer to avoid it, avoiding advice or fear of introspection.

Knowledge acquisition

The acquisition of knowledge appeared to be a tool to regain control (over one's body weight, interactions with food, etc). Each professional (surgeon, physician, dietitian and psychologist) is involved in providing advice to patients during consultations or dedicated support groups after surgery. Besides those healthcare professionals, patients developed two other main sources of knowledge: empirical knowledge resulting from their experience of the life changes brought about by surgery and knowledge through sharing experiences with peers (table 2).

Each meal or type of food could be a novel experience, sometimes leading to adaptation (eg, relearning phenomenon regarding permitted food types and quantities, perception of having eaten too much). This empirical reappropriation of one's body constituted informal knowledge acquisition.

Via discussions on the internet, patients perceived that peers could be more useful than physicians in terms of advice and better understand the consequences of surgery on everyday food habits and on body changes. However, they also found that the large quantity of information provided on the forums was questionable, and that some of it needed to be confirmed by a physician.

Fears

Fears could emerge at all stages of the surgery and postsurgery pathway: the fear of being dependent on medical

Table 2 Examples of verbatim quotes relevant to each theme

Themes and subthemes	Verbatims
Theme 1: regaining control	
Regaining control	P17: Just before the operation, say a year and a half before, I did a follow-up but really, really, really diligently and I managed to lose 15 kilos with a rebalancing of my diet; and then a personalized follow-up with a coach, and at one point, I said to myself that frankly I couldn't take it anymore, I really had to try something else because I had tried everything {… } I was so desperate…
An administrative process	P4: For me, it was just a formality so that you could… so that the intervention could, basically, be approved by the social security, be reimbursed. P13: It's really standard procedure… That is to say, you have to see a psychiatrist because it's the law and that's that… There is no dynamic, no research or anything, not at all…. at (Name of the hospital).
Feelings of victory after surgery	P11: You eat very very little; it didn't bother me, I wasn't hungry any longer… the fact of not being hungry… in your head you're not hungry… you eat a little… the pleasure of eating and being happy that I wasn't stuffing myself… It was an immense joy… P4: I really wanted something where afterwards, I would have more, basically, I would have things to do, in terms of diet, things like that, but no, no constraints, or too intensive a follow-up after the operation. P17: I did not need to tell myself that I needed someone to give me support; at the very least a health professional to give me support to go towards what I wanted to be.
Theme 2: knowledge acquisition	
Empirical knowledge	P8: It's as if you were a newborn, you relearned what you liked, what you didn't like, what you should eat and what you shouldn't. It's very weird. P5: I didn't necessarily realize that I had eaten too much and that it was too late… Today I can… well, recognize the warning signs.
Exchanges with peers	P8: I didn't have any follow-up so in fact the few things that could help me… were testimonials; people who were also going through the same thing or who had already gone through the same things… what we call "old sleeves", who had had surgery six or seven years before that helped us a lot. P7: the doctor… the surgeon, even if he knew his job perfectly—I had complete confidence in him—but he didn't experience the thing, so we couldn't share that much… he couldn't necessarily understand the physical change… the change in diet, the rapid weight loss… he didn't see it. P8 : (Social networks) It was the only help I really could get (…). As I told you, the surgeon was not good (the patient described the surgeon's language and support as not adapted).
Information that needs to be confirmed by a physician	P14: there is so much in the testimonials… all so different, I had so much information that suddenly I said to myself that I would see for myself what it [surgery] would do for me… I'm going to avoid giving too much importance to the testimonies because they worried me more than anything else. P4: you try to get information on the internet, a little bit in the forums, but you see all sorts of stuff.
Theme 3: fears	
Preoperative fears	
Rejection of the patient's demand for surgery by the specialist centre team	P1: well I was afraid that it would not be accepted… or that we would answer badly or we don't know what they expect from us… is that if we answer on the side …. they have a quota. P3: There, I went there a little stressed… because my sister-in-law told me (…) they sort people… they don't take everyone.
Surgery	P10: I said to myself that if it happens I'm going to stay on the operating table, I'll never come back up… I didn't want to die so soon. P11: I was very, very scared because I found myself in the room before going to the block, I was all alone… But I was panicked, panicked. Deep down, deep down I was very, very scared.
Postoperative fears	
Immediate postoperative complications	P7: I had a big apprehension to drink my first sip of water, to wonder if there was no leak, is everything closed properly. P4: I had trouble projecting myself on a stapled stomach and how it was going to heal.

Continued

Table 2 Continued

Themes and subthemes	Verbatims
Long-term complications	P7: if 1 day I fall ill and I need to take treatment, will it be as effective as if I had not been operated on since everything that is assimilated is not assimilated correctly.
Excess of weight loss	P4: it's something that can quickly turn into paranoia when you lose a lot of weight.
Weight regain	P10: my biggest fear is gaining weight… I was told no, I wouldn't gain weight if I'm careful and they advised me to go see a psychiatrist but I didn't want to because that they told me that by saying that I'm going to gain weight, it's going to go to my head. P4: (the follow-up) it's a safeguard that I also need to have because I know that, well, it can quickly resume, especially since I'm two and a half years into the operation, we have more follow-up… we can eat anything all day long.

decisions, especially to get the green light for surgery, apprehension about the surgical procedure, and more importantly, worry over postsurgery physical and psychological changes, changes in diet, and mourning one's previous body image. One participant described this way of life as "a way of juggling with constraints" (P6) (table 2).

Coordinated care pathway to sustain individual restructuring

The participants' strong desire to regain control, to acquire knowledge and to deal with their fears meant that they searched for a relationship with their care providers that was more based on listening, and where professionals would be more attentive to their feelings during follow-up. These three dimensions, therefore, constituted the pillars of adequate follow-up. Some patients described their relationship with their follow-up care provider as dysfunctional, citing a lack of information, a lack of expertise, and a medical attitude which they perceived as inappropriate (table 3: subtheme: negative experiences). Such elements can prompt patients to interrupt follow-up (table 3).

The GP was not identified by our patients as an important professional in follow-up. Indeed, if a GP advised against surgery or was perceived as not showing much enthusiasm for postsurgery follow-up, patient trust in him/her was lost.

DISCUSSION

Collecting the experiences of 17 patients who underwent bariatric surgery, we present an original conceptual framework of follow-up. The patient-centred approach we used revealed unexpected themes, such as the need for patient autonomy in the sense of less dependency on care providers (regaining control), the importance of experience to engage diet modifications (knowledge acquisition), and the need for care providers to have expert knowledge and to be good listeners (of their fears, and individual restructuring). Organisational aspects appeared to be of secondary importance.

Patients' representations

Patients' representations after bariatric surgery have previously been explored in the literature. Coulman *et al* described themes such as control over one's eating, the joy of returning to normality (ease of performing daily activities, social acceptance).[19 20] Like us, they found ambivalence in participants' discourses; their feelings were mixed as some of the postsurgery changes they experienced were positive, some were unexpected, and others were difficult. However, the reasons for adhering or not adhering to follow-up were not explored in detail by the authors. Our research suggests that specialists should ask patients about their desire for autonomy after surgery, and about how specialist teams can—in their opinion—best provide support without being too restrictive or intrusive. These questions can change over time and evolve with the type of patient–care provider relationship.

Doctor–patient relationship

Analysing our results following conceptual frameworks of the doctor–patient relationship with four key elements (mutual knowledge, trust, loyalty and respect),[23] we find that different types of factors adversely influenced the relationship as follows: patient factors (obesity is a 'frustrating disease'), care provider factors (doctors with insufficient expertise) and systemic factors (time constraints and sometimes a high patient–provider ratio during the perioperative period). The team of follow-up professionals can, therefore, either be helpful or of no help to the patient in terms of encouraging the latter's engagement in follow-up and fostering a feeling that he/she is being supported in the face of postsurgery changes. Using the concept of abandonment (or what Ridd *et al*[23] calls a lack of loyalty) and isolation, Coulman *et al* described that specialist bariatric teams were often perceived by patients as not satisfactory (ie, not enough expertise or inappropriate language with the patient) and primary care by GP as not supportive enough.[20] Knowledge acquisition from multiple sources could give rise to conflict in the relationship the patients had with their care provider, as the latter was less expert than them.[24 25]

General physicians and bariatric surgery

This disequilibrium, where the patient knows more than the physician, is mostly observed in primary care. In Australia, GPs were more likely to advise against surgery, as they had mostly seen patients with postsurgery-related complications.[25] This perception could impact the

Table 3 Examples of verbatim quotes relevant coordination of care pathways

Care provider category	Subcategories	
	Positive experience with care provider	Negative experience with care provider or negative reason for other reasons
Medical team	P11: Oh yes, he had given me a diet sheet, yes, yes… He had told me that I should do this, that, I should do sports, I should continue like this, like that, he had given me the whole plan, the whole plan, yes. P11: I went to see the doctor, he weighed me and then he forced me to go to the gym… so I went to a physical therapist and I did sports… two hours every day, four times a week… It was pool sports so it was good for me.	P5: Well… Well, I didn't have any post-op follow-up except with the surgeon …. It's a psychological shock in fact… I would have liked to be followed up by someone. At least a professional. I think that yes, psychological follow-up would not have hurt and especially nutritional follow-up. P9: So I'm stagnating in terms of weight (…) so it's a question that I have to ask myself and that I have to try to get the motivation to go and see someone, to see a surgeon or whatever (…) to get motivation back. P8: (patient's expectation of the physician) Help him (i.e., the patient) but without necessarily putting him in a state, maybe making remarks, it's normal. But make remarks while slipping in some solutions; I don't know, stuff like that.
Surgeon	P4: The surgeon, the doctor who was really very kind, well he really, he is someone who, who changed my life, who is kind, very professional, who (…) says things, who, well, who is quite honest.	Few exchanges: P12: While the surgeon, yes, he does the control X-rays, everything is fine, thank you bye …. It's more to reassure himself, to say that everything is fine, that the stomach is fine and that's all.
Psychologist	P7: I'm going to see a psychologist for evaluation… in relation to the operation, accepting your new body is not always easy, it's still a big change… I think it is still very difficult to accept the change when you look in the mirror.	Difficulties to engage a psychological follow-up: P9: I didn't do it by myself, it's a mistake, clearly it's a mistake… I think I wouldn't be where I am if I had done a real psychological follow-up with someone…For me, it's a mistake, it's a mistake (…) for example this week, I made some deviations, I talk to someone and we try to see why and how to correct it and what is the path that made me make deviations.
Dietician	P3: She reassured me by telling me that, for me, without the operation, it would have continued to be a struggle… with food… so… it was the nutritionist who spoke to me about the psychological impact. … it's quite personalized so they remember you. P7: After all, in the beginning right after the operation, the dietician was available by phone whenever I wanted, and that was still a plus. I could call her during office hours if I had any questions.	
GP	Trust P7: (the follow-up) with the GP was every two months for the first year and afterwards spaced out… but I think it was mainly to reassure me about the weight loss, if it was normal. P5: (about her GP) he's known me since I was a little girl, I've known him since… well I was a baby so it's actually uh… I'm used to seeing him… I figured if he's telling me to do the surgery, it's because…he knows what he's saying	P7: I always think it's better to go to specialists even if a GP is supposed to know everything in general but sometimes I feel like if… Well, maybe not, I don't know, at first when I told him I had done a bypass, he thought a little, "Oh yes, what is it, what did they do to you ?" whereas for me, when I say bypass, he should know right away what it is. P1: I didn't agree with the doctor afterwards, when I got sick because he always wanted to reject the fact that I fell in weight…, that I fell a lot… and that all my health problems came from the sleeve.

Continued

Table 3 Continued

Care provider category	Subcategories: Positive experience with care provider	Subcategories: Negative experience with care provider or negative reason for other reasons
Organisation	Optimal with excellent care-provider availability P14: I saw the surgeon again a month later and I saw the dietician and the psychologist again a month later, and then I still have scheduled appointments with the psychologist and the dietician and the surgeon as well, quite regularly… I am not left in the wilderness all alone… I don't feel alone, I am not left in the wilderness… There is a follow-up for my weight, for how I feel. P3: (About the organization of her follow-up) I could contact them… uh, when I wanted… I could make an appointment when I wanted… if I needed, so uh really me, I find that it all went ideally. …it's good, yes, to have doctors… people, uh, that you can count on… uh, available just in case… I could have an appointment, uh, for the next week… if there was a need… P6: With this surgeon, you could call her at any time… P13: There is no judgment, in no way do they position themselves as the holders of the Holy Grail… They don't want to make people feel guilty at all and I think that's really great. If we do something stupid, we tell them, they have this tolerance, this intelligence too, and it's real that it's very interesting. P3: I put that as a priority… and then they were also very insistent… telling me that the follow-up is important… "if you don't come, we'll call you"… so, uh, they too are very, on that point, very matter-of-fact.	Request to be compelled to adhere to follow-up: P9 (lack of follow-up) Personally I think it's laziness. I don't know, it's not a financial problem. P15: It happened several times …I went two or three times to the hospital … so I systematically specify that I had been operated on for bariatric surgery and each time, I was told "here, it is not our specialty, we don't know, we don't have a doctor who knows, so if it has something to do with that, you'll have to go back to the hospital where you were operated on". P4: It should be compulsory, perhaps, the follow-up afterwards, well, it's… "if you don't do this follow-up, you won't be taken care of". In fact, before the operation, we have to do [all the checks], otherwise the file for the health insurance is not complete (…). We should have this same system; you have to see such and such a specialist during the first or second year to be able to continue to be covered if you want to have an operation, if you want to continue to have follow-up with reimbursed drugs. (…) We know very well that if there are things that are conditional, we do them, and if there are no conditions, we don't do them.

GP, general practitioner.

patient–provider relationship negatively (lack of trust as an explanatory element in the concept of follow-up[21] when patients decided to go ahead with surgery despite GP advice). In France, GP did not feel comfortable managing this population because of their lack of expert knowledge or misconceptions they had about surgery.[26] Similarly, English GP attitudes towards bariatric surgery were ambivalent.[27] We advocate a better discussion of each care provider's role during the preoperative educational programmes.

Networks

Our patients reported their reliance on social networks to find answers to many questions after surgery. Many authors underline the value of networks for emotional support and for useful information.[28 29] For some patients, these social interactions replace classic medical follow-up, which they neglect because of their distance from the specialist centre or time availability issues. However, in our study, the use of the internet did not appear to compete with postsurgery follow-up.

Organisational aspects

Few of the patients in our study commented on the organisational aspects of follow-up (consultation frequency, appointment schedules, recalls for missed appointments, other ways of communication).[30 31] However, a Canadian study highlighted that it is essential that each specialist focus on all these aspects central to ensure comprehensive follow-up is being offered, with a view to improving patient adherence.[30]

In Louisiana, USA, respondents cited the cost and means of transportation, distance from the specialist centre, a lack of time, scheduling conflicts and problems with contact numbers to reschedule appointments as some of the reasons for their poor adherence to follow-up.[32] The possibility for a patient to choose the clinician he/she would like to be followed by was possibly a reason for successful follow-up.[32] The development of telemedicine could be a tool to increase follow-up, although with some reservations that each team will need to be taken into account.[33]

Strengths and limitations

This study's main strengths are the rich and varied data collected in the interviews and the indirect constructivist patient-centred approach we used to analyse the follow-up. The choice not to directly ask patients why they were adherent or not to follow-up led to the emergence of unexpected themes.

The study has several limitations. First, in response to the failure to recruit lost-to-follow-up patients from our centre (an already specific population), most of the study sample were recruited through social networks. This led to quite a specific population, which had high professional, health literacy and digital literacy levels, leading to recruitment bias. Indeed, our population is not representative of the overall population of patients undergoing bariatric surgery. Furthermore, during patient recruitment, we do not have data on the source population (data not available at the social media level) and/or the reasons for non-inclusion (incorrect phone number or refusal in the hospital cohort).

Second, very few data on the organisation of follow-up care were collected. As patients spoke spontaneously, we cannot be sure to what degree follow-up was inadequate. Third, we could have used specific questions to investigate patients' relationships with dieticians and psychologists. Finally, for this research, we did not ask participants to comment on transcripts or to give their feedback on the findings.

Conclusions

To improve follow-up after bariatric surgery, care providers should become acquainted with and question patients about their need for autonomy and their perceptions of exchanges with different professionals. Care providers should also make a determined effort to engage patients in follow-up. They should also be trained to improve their communication skills. The use of social networks can be recommended to provide emotional support and to share information with peers. However, these networks cannot replace medical follow-up, especially concerning clinical evaluation of comorbidities and the prescription of vitamins. Finally, specialist centres must remember that despite GPs' lack of expert knowledge, they still remain the primary interlocutors for care coordination. Setting up focus groups to discuss our study's results can add to the research presented here.

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