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Sexuality amongst heterosexual men with morbid obesity in a bariatric surgery programme: A qualitative study

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Abstract

Aim and Objectives: To describe and understand the experiences of sexuality amongst heterosexual men diagnosed with morbid obesity (MO) who are in a bariatric surgery programme.

Background: Morbid obesity is a chronic metabolic disease that affects men's physical, psychological and sexual health. Evidence suggests that MO could be linked to anxiety, depression, low self-esteem, sexual life and social disorders. Bariatric surgery is a reliable method for weight loss in patients with MO.

Design: This is a qualitative study based on Merleau-Ponty's phenomenology, and the COREQ checklist was employed to report on the current study.

Methods: Convenience and purposive sampling was carried out and included 24 indepth interviews with heterosexual men with MO in a bariatric surgery programme between October 2018-March 2019 in Spain.

Results: Two main themes emerged from the analysis: (a) a corporality which is judged and condemned; and (b) adapting sexual practices to bariatric surgery.

Conclusions: Men with MO reject a body that limits their physical, social and sexual life. A negative body image and low self-esteem, which do not respond to the traditional masculine role or new masculinities, reduce men's self-concept. Men with MO feel rejection, stigma and isolation. Support from their partner is fundamental to adapt.

Relevance to clinical practice: The results of the study draw attention to how heterosexual men with MO experience their sexuality in a bariatric surgery programme and the challenges nurses face. Recognising the problem, helping to develop coping strategies or referring to specialists in sexuality could improve the quality of life in patients and their partners.

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KEYWORDS

bariatric surgery, male sexual dysfunction, morbid obesity, qualitative research

1 | INTRODUCTION

Morbid obesity (MO) is a chronic metabolic disease that affects men's physical, psychological and sexual health. Although the treatment of MO has focused essentially on diet, physical exercise or pharmacotherapy (Srivastava & Apovian, 2018), bariatric surgery has been shown to be a reliable method for weight loss and improving the quality of life on a physical, psychological and sexual level. As the majority of candidates for bariatric surgery are women, there is a scarcity of literature related to men's experiences of bariatric surgery (Edward, Hii, Hennessy, & Thompson, 2018). Although some studies have focused on men's experiences in bariatric surgery (Cohn, Raman, & Sui, 2019; Lynch, McGowan, & Zalesin, 2018), little is known about how they experience their sexuality.

2 | BACKGROUND

Obesity, defined as a percentage of fatty mass >25% in men and >33% in women, or as a body mass index (BMI) >30 kg/m², is a chronic metabolic disease that affects adults, adolescents and children (Engin, 2017). Obesity is a global public health problem: 39% of adults are overweight and 13% obese (WHO, 2017). The prevalence of obesity varies by country (Mazer & Morton, 2018), affecting 20.5% of women and 22.8% of men in Spain (Lecube et al., 2017). Moreover, MO in Spain affects 1.6% of the population between 25-64 (1.2% of men and 2.04% of women) (Aranceta-Bartrina, Pérez-Rodrigo, Alberdi-Aresti, Ramos-Carrera, & Lázaro-Masedo, 2016). The diagnosis of MO implies a BMI of 40-49.9 kg/ m² (Mechanick et al., 2009; Mechanick et al., 2013), resulting from genetic/metabolic origins (Lecube et al., 2017), unhealthy lifestyles, lack of physical exercise or a hypercaloric diet (Wu & Berry, 2018). MO decreases life expectancy (Engin, 2017), possibly because of physical and movement problems, coronary vascular comorbidity, diabetes, hypertension (Sfahani & Pal, 2019; Wingfield et al., 2016) and cancer (Rowland, McNabney, & Mann, 2016). Morbid obesity has been linked to depression, anxiety, low self-esteem (Taskin, Karakoc, & Demirel, 2019) and body image disorders (Nath, 2019). Furthermore, MO can negatively affect individuals' social relationships (Albano, Rowlands, Baciadonna, Lo Coco, & Cardi, 2019) and sexual health (Rowland et al., 2016; Sfahani & Pal, 2019). Sexuality is a central aspect of human life and includes sex, gender role, sexual orientation, eroticism, pleasure or reproduction and is influenced by biological, psychological, social and cultural factors (WHO, 2006). Sexual health is a state of physical, mental and social well-being related to sexuality; various pathologies affect sexual health and can result in sexual dysfunction (Chou, Cottler, Khosla, Reed, & Say, 2015). MO influences all the dimensions of sexual functioning (Bates, Pastuszak, & Khera, 2019), and therefore, men with MO are

What does this paper contribute to the wider global clinical community?

- This study provides novel insights into how heterosexual men with MO enrolled in a bariatric surgery programme live their sexuality.
- MO imposes severe limits on the sexuality of men and their partners; facing up to the problems implies the taking of decisions together with their partner and following suitable sexual practices while they are waiting for bariatric surgery.
- Bariatric surgery nurses can help to explore the experiences of these patients in the clinic, giving advice on strategies to confront the problems or referring to specialists in sexuality.

prone to male sexual dysfunction (MSD) (Carr, Murphy, Batsoin, & Springer, 2014; Sarwer et al., 2015). MSD is an underestimated problem in MO (Arolfo, Scozzari, Di Benedetto, Vergine, & Morino, 2020), and 50% of men mention sexual dissatisfaction (Pomares-Callejón, Ferrer-Márquez, & Solvas-Salmerón, 2018; Steffen et al., 2017).

Individual, social and environmental factors also contribute to MSD, stigma and loss of quality of life in MO patients (Nath, 2019; Sharman et al., 2016). Although MO treatment has focused on diet, physical exercise and drugs (Baillot, Mampuya, Comeau, Méziat-Burdin, & Langlois, 2013; Srivastava & Apovian, 2018), bariatric surgery has been shown to be a reliable method of loss of weight improving quality of life (Kabu & Özbayır, 2019; Wingfield et al., 2016), body image and sexual functioning (Bates et al., 2019; Quinn-Nilas, Benson, Milhausen, Buchholz, & Goncalves, 2016). Men with MO, driven by loss of mobility, confidence and self-esteem, try to be included in a bariatric surgery programme (Wu & Berry, 2018), whose inclusion criteria are as follows: being an adult with a BMI ≥40 kg/m²; or being an adult with a BMI of 35–39.9 kg/m² and having associated chronic conditions (type 2 diabetes, hypertension, hyperlipidemia) (Landecho, Valentí, Moncada, & Frühbeck, 2017; Sabench et al., 2017).

Research on men with MO awaiting bariatric surgery has focused on treatment (Rowland et al., 2016), exercise (Baillot et al., 2013), conduct disorders (Nath, 2019), body image (Bertoletti, Galvis, Aparicio, Bordignon, & Trentini, 2019; Taskin et al., 2019), gender differences (Barragán et al., 2018) or social relations (Baillot et al., 2013). Although several studies have focused on presurgical experiences and expectations in men with MO awaiting bariatric surgery (Cohn et al., 2019; Lynch et al., 2018; Poulsen et al., 2016; Ramos, Forhan, Caulfield, Sharma, & Raine, 2019), more research is needed on how they experience their sexuality (Haga, Furnes, Dysvik, & Ueland, 2020; Pratt

et al., 2016). Our theoretical framework is the phenomenology of perception of Merleau-Ponty (2002). We understand the world through the body, to be in the world, is to discover that the body perceives the world in the incarnation of things. Our research points to men's bodily experiences, gender meanings, how others look at them and how they experience themselves and their sexuality.

2.1 | Aim

The aim of the study is to describe and understand the experiences of sexuality amongst heterosexual men diagnosed with MO who are in a bariatric surgery programme.

3 | METHODS

3.1 | Design

A qualitative study that uses Merleau-Ponty's hermeneutic phenomenology (Merleau-Ponty, 2002) was developed and reported

in accordance with Consolidated Criteria for Reporting Qualitative Research (COREQ) (Tong, Sainsbury, & Craig, 2007) (Appendix S1). This approach allows us to understand the first-person perspective of heterosexual men with MO included in a bariatric surgery programme on the phenomenon of their sexuality. Merleau-Ponty's arguments on how a person's choices can be understood as situated inform our exploration of men's sexual experiences in their decision to undergo bariatric surgery, and how such decisions may have medical, social and moral aspects.

3.2 | Participants and setting

Through convenience and purposive sampling, 24 heterosexual men diagnosed with MO were selected before bariatric surgery (Table 1). The criteria for inclusion were as follows: being a 18- to 50-year-old man; inclusion in a bariatric surgery programme; and having given informed consent. Exclusion criteria were as follows: being in another phase of obesity treatment; having been diagnosed with chronic diseases that generate MSD; taking inhibitory medication for male sexuality; having undergone prior bariatric surgical procedures; and

TABLE 1 Demographic characteristics of participants (n = 24)

Participant	Age	BMI, kg/m ²	Onset of obesity	Marital status	Children	Profession	Other weight loss treatment
IDI1	43	61.4	Adolescence	Married	2	Engineer	Diet
IDI2	46	51.8	Adult	Married	2	Commercial	Diet/pickups
IDI3	43	66.7	Childhood	Single	0	Farmer	Diet/pickups
IDI4	47	40.9	Adult	Married	2	Commercial director	Intragastric balloon diet
IDI5	37	51.3	Adult	Married	0	Petrol worker	Diet
IDI6	58	46.3	Adult	Married	2	Bar worker	Diet
IDI7	50	45.2	Adult	Married	4	Farmer	Diet
IDI8	66	41.3	Adult	Married	3	Farmer	Diet
IDI9	37	35.1	Adult	Separated	1	Truck driver	Diet
IDI10	39	58.4	Childhood	Married	0	Stone mason	Diet/pickups
IDI11	46	49.2	Adolescence	Married	2	Commercial	Diet
IDI12	37	46.1	Adolescence	Married	2	Commercial	Diet
IDI13	63	40.2	Adult	Married	2	Military	Diet
IDI14	52	38.1	Adolescence	Married	2	Administrative	Diet
IDI15	59	39.2	Childhood	Married	0	Farmer	Diet
IDI16	50	53.5	Adolescence	Married	2	Commercial	Diet/pickups
IDI17	57	40	Childhood	Single	0	Retired	Diet
IDI18	42	51.6	Childhood	Married	3	Insurance expert	Diet
IDI19	38	38	Adult	Married	2	Administrative	Diet
IDI20	38	52.2	Adult	Married	0	Farmer	Diet/pickups
IDI21	43	46.1	Childhood	Single	0	Mechanical	Diet
IDI22	38	54.9	Adolescence	Married	0	Hostelry	Diet
IDI23	48	42.8	Adolescence	Married	2	Commercial	Diet
IDI24	51	43.6	Adolescence	Married	2	Commercial	Diet

Abbreviations: BMI, body mass index; IDI, in-depth interview; IGB, intragastric balloon.

TABLE 2 Interview protocol

		-
Stage	Subject	Content/Example questions
Introduction	Motives, reasons	Know the experiences of their sex life in this phase of \ensuremath{MO}
	Ethical issues	Ask them about their willingness to take part, inform them about the recording, consent, possibility of dropping out, confidentiality
Beginning	Introductory question	Tell me about your experience of MO
Development	Conversation guide	How has MO affected your sexuality? What effect has it had on your circle of friends? How has it affected life with your partner?
Closing	Final question	Is there anything else you would like to tell me?
	Appreciation	Thank them for taking part, remind them that their testimony will be of great use and place ourselves at their disposition

Abbreviation: MO, morbid obesity.

refusing to participate in the study. Five patients declined to participate in the study as they refused to discuss their sexuality. The study took place in two hospitals in the south of Spain between October 2018–March 2019.

3.3 | Data collection

Twenty-four in-depth interviews (IDIs), on average lasting 34 min, were conducted in Spanish. The IDIs took place in a quiet private room, annexed to the hospital surgical department, with the sole presence of the patient and nurse interviewer. Participants were contacted by phone, using the help of surgeons and nurses assigned to the bariatric surgery programme for MO, making an appointment during their consultation and requesting their participation. The interviews were carried out by nurses who had known the patients since they were admitted to the bariatric surgery programme, and this fact gave them confidence to ask the interviewees about their sexuality. After conducting three pilot interviews, focus groups were dismissed because the men refused to discuss their sexuality in the presence of other participants. Each participant carried out only one individual interview, and field notes were collected for the interpretation of the results. A guide to relevant questions, with the participation of nurses, bariatric surgeons and experts in qualitative research, was designed to encourage participants to give in-depth answers (Table 2). All the researchers agreed on a definitive interview guide. The IDIs were performed by two trained female nurses, with master's degrees and 6 years of professional experience in bariatric surgery units. Prior to the IDIs, the nurses informed the participants of the aims of the study and that it would not interfere with their bariatric surgery process, sociodemographic data collected and the consent form signed. After the IDIs, participants were given the chance to check the transcriptions, and data collection ceased when data saturation was reached.

3.4 | Data analysis

The interviews were audio-recorded and transcribed verbatim, the accuracy of the recordings was verified, and they were analysed using Colaizzi's discourse analysis method: 1. become familiar with the data and acquire a sense of everything by reading the transcripts of the participants (reading-rereading); 2. identify statements of direct relevance to the phenomenon under investigation (citations); 3. identify relevant meanings for the phenomena that arise from citations (coding); 4. group the meanings identified into common themes (categorisation); 5. write a complete description of the phenomenon incorporating the topics from the previous step; 6. condense the description into short dense statements that capture essential aspects of the structure of the phenomenon; and 7. return the basic structure statement (step 6) to the participants asking whether it describes their experience (validation). All participants were given the chance to validate the results, but only 14 participants did so, and they did not make any corrections. Triangulation of researchers was used to analyse the data: MJTS and ARM conducted interviews and analysed data. MJTS, OMLE and MFM coded data, grouped codes and discussed the data with other researchers until reaching agreement. JGM, CFS and JMHP interpreted the phenomenon, described terms and established their relationships. JGM, CFS and JMHP also created a table to summarise the emerging themes, subthemes and units of meaning. This table was returned to the research team for discussion, agreement and final approval (see Table 2). An example of theme coding can be seen in Table 3. All the participants' IDIs were recorded, transcribed and analysed with the ATLAS-ti. 8.0 program.

3.5 | Rigour

The quality criteria of Lincoln and Guba (1985) were adopted to assess the quality of the study. Credibility: The data collection process was detailed, data interpretation was supported by triangulation of

TABLE 3 Example of the codification process

Quote	Initial codes	Unit of meaning	Subthemes	Theme
"My wife has a hard time with any	Physical contact, other positions,	Integrating	The partner,	Adapting sexual practices until bariatric surgery
gesture or panting during intercourse.	woman on top, communication	disfunction,	support for	
She watches me, scared, she thinks she	Worry, anxiety, tiredness, shortness	Fear of	sexuality in	
is going to give me a stroke"	of breath, sweat, medicines	complications	man with MO	

Abbreviation: MO, morbid obesity.

researchers, and the analytical process was reviewed by three independent reviewers. Transferability: A detailed description of the study environment, participants, context and method was carried out. Dependability: Interpretations/conclusions were reviewed by two expert researchers from outside the study (surgeon and bariatric surgery nurse), who were not involved in data collection or analysis, and both corroborated the analysis. Confirmability: The interviewers returned to the participants to verify the accuracy of the transcribed interviews and interpretations. In addition, the researchers independently read the interview transcripts to clarify and agree on emerging themes and subthemes.

3.6 | Ethical considerations

The study was carried out in accordance with the ethical standards established by the Helsinki Declaration. Approval was obtained from the Ethics and Research Committee of the Department of Nursing, Physiotherapy and Medicine (No. 45/2018). The data were arranged to protect the identification of the participants, their integrity and access to the files. Informed consent was obtained from all individual participants included in the study.

4 | RESULTS

All participants self-identified as male with MO, included in a bariatric surgery programme, in heterosexual relationships, and the mean age of the group was 47 years old (SD=8.47) (range 37–66). The average body plus BMI index of the participants was 47.2 kg/m²; 29.1% were diagnosed with MO during adolescence, 33.3% in childhood and 41.6% as adults. 83.3% were married, 12.5% were single and 4.1% were separated; the mean number of children was 1.4 children/man (See Table 1). Two themes and five subthemes emerge from the inductive analysis of the data and allow for a description and understanding of the experiences of sexuality amongst heterosexual men with MO included in a bariatric surgery programme (Table 4).

4.1 | Theme 1. A corporality which is judged and condemned

Men with MO included in a bariatric surgery programme have had their physical, mental and sexual health affected. MO is a stigmatised disease, subjected to moral judgement by society and the patients themselves. Aware of the deterioration of their body image, patients reject a body that they blame for their own limitations. After trying to lose weight by other means, trapped in a body that limits them, heterosexual men see in bariatric surgery the hope to redirect their lives on a social, work, sexual and relationship level.

4.1.1 | Subtheme 1. The deterioration of the self-concept blocks sexual life

Self-concept and body image are central in living with MO. Along with organic causes, the loss of self-esteem and distance from the dominant social aesthetic models affect seduction and desire. This subtheme describes how men feel about themselves and their bodies. Men with MO are insecure, self-conscious and dissatisfied with their body image. Intimacy and physical contact generate embarrassment, inhibition and emotional distress. MO directly affects relationships of couples; as one participant says, men can take on behaviour to avoid sex and understand that their partner is doing the same.

The first thing you think is 'I don't know how she (wife) can sleep with me'. If it were the other way around... I don't know whether I would be able to.

(IDI6, married, 50 years old)

Morbid obesity weakens their self-concept, and even if they try, they lose interest in themselves and their sexuality. In this phase of obesity, the men are irritated, and, distant from physical activity, they feel tired, sleep a lot and try to forget their situation. They perceive that their partner does not enjoy sex with them, and quarrels increase. This feeling of insecurity generates a constant fear of being abandoned. Heterosexual men with MO suffer a process of progressive mistrust towards their partner that leads to controlling behaviour. As one participant says, they fear that their partner will leave them for younger/more attractive men.

I often think that she (wife) will leave me, she will look for a normal man, with a normal body and have normal sex. MO limits you in everything, sex as well.

(IDI1, married, 43 years old)

TABLE 4 Themes, subthemes and units of meaning

Theme	Subtheme	Units of meaning
A corporality which is judged and condemned	The deterioration of the self- concept blocks sexual life	Negative body image, rejection of my own obesity, insecurity, irritability, low self-esteem, emotional block, limitations in daily life, unhappiness
	Masculinity discussed: I didn't come to look after the girls' handbags	Social stereotype of beauty, cult of the body, impossible to hide, retreating within oneself, isolation, fear of refusal, frustration, resilience, stigma
Adapting sexual practices until bariatric surgery	With this body I can't: adapting to physical limitations	Reduced mobility, limitation of sexual positions, hypoactive sexual desire, erectile dysfunction, medication, hormonal disturbances, size of penis, masturbation
	When the flame of desire goes out	Feeling, lower frequency of sex, loss of sexual desire, orgasm problems, avoidance of intercourse, personal separation, fear of failure, hope in surgery
	The partner, support for sexuality in man with MO	Emotional proximity, confronting monotony, integrating disfunction, normalising sexual abstinence, fear of complications, support to take decisions

Abbreviation: MO, morbid obesity.

In men, MO is associated with hypogonadism, decreased testosterone levels and erectile dysfunction. When they undress, they expose a body that they do not accept. In the sexual relationship, they fear being judged by the size of their penis, and there are emotional blocks, lack of erection and impotence. As one participant says, erotic games, attractiveness and desire are lost. Anxiety, doubts, frustration and dissatisfaction put the couple's sexual life at risk.

If in sexual intercourse you have problems with your body, everything is finished. Your partner says, 'What's up? Don't you like me? Don't I turn you on?.. Are you thinking of someone else?' Everything comes to mind, you block yourself and think, where are you going with this body?

(IDI1, married, 46 years old)

They do not look attractive to themselves, and they have flab, redness, sores, chafing and grazes. Despite strict hygiene, they may have a bad smell, and they frequently use creams and dressings on their legs, abdomen and chafing areas. This is not pleasant for them or their partners, it does not help eroticism, and they recognise this and do not like it:

My legs were red, with warts, covered in cream. Then the friction, the heat, the sweat,... although my wife loves me,... I don't like it!

(IDI5, married, 37 years old)

4.1.2 | Subtheme 2. Masculinity discussed: I didn't come to look after the girls' handbags

Men with MO are blamed for being overweight and branded as gluttonous, lazy and lacking in self-control. In a society where the cult of the body predominates, these men do not follow stereotypes of beauty; they are seen as unsightly and lose their attractiveness for social, sexual and partner relationships. Aware of their limitations,

they gradually stay alone, become isolated and are singled out. As one participant says, there is always a trigger that makes you think of bariatric surgery as a solution.

You see a small boy playing, he sees you and is shocked, he looks at you, tells you that you are different,... it affects you, it touches your soul!

(IDI2, married, 46 years old)

On a relational level, there are activities that they cannot do without making others laugh at or mock them, and they feel ashamed. Other times, they feel they are the object of pity, condescension or overprotection. In social or leisure gatherings, they are uncomfortable, find it difficult to move and get tired. MO is a visible disease because their body cannot hide it. This can be seen in one participant who is going to dine with friends.

In the restaurant you need space ... there's not always a big chair for you. Sometime I have to wait standing up, and it tires me. They say: Is everything OK? Don't worry!No, it's not pleasant. What are the girls going to think?

(IDI17, 40 years old)

Morbid obesity patients are usually less successful with girls, and, aware of their problem, they modify their behaviour and redirect their interests. They lower their expectations when looking for a partner, begin to accept things and even stop trying. This is how one interviewee expresses it:

I know that my body does not meet the ideal conditions, I've suffered rejections, I looked for plump girls in order to be more successful,... but it was impossible.

(IDI3, single, 43 years old)

Demands for them to lose weight also come from women, who prefer healthy-looking, nonobese, men who take care of themselves.

The image of a muscular, shaven metrosexual man clashes with the appearance of heterosexual men with MO. Although they may take care of themselves and give value to "other bodies," it is difficult to attend the demands of their partners.

My wife accepts me as I am but asks me to look after myself, get up off the sofa, get out of the house. Little by little you let things go, you seldom shave, you forget to dress well ... I won't have a young man's body now, but she deserves something else.

(IDI23, married, 48 years old)

While new masculinities encourage men to look after their image more, the old social stereotypes require them to be strong, tough and protective, to hide emotions or sensitivity. Heterosexual men with MO are aware of the difficulty of responding to these requirements when establishing a sexual relationship or finding a partner as they realise that they do not meet them.

You go out for some drinks and see that you don't fit into the stereotype of a dominant man, tough, strong, muscular,... there's no place for us.

(IDI9, separated, 37 years old)

The social image of a virile man, who initiates courtship, conquering women and fulfilling their sexual requirements, persists. This forces men to initiate the approach, express their desires, risking emotions and begin the sexual game. Heterosexual men with MO go through this situation in fear and insecurity; they feel obliged to play an active role in a sexual life that they would like to share with women.

Before (MO) I was more active, I always took the initiative in sex,... not now. I say to my wife, don't blame me, you don't feel like it either.

(IDI2, married, 46 years old)

Men with partners report that their wives do not seek sexual intercourse, thereby decreasing its frequency and quality. Their partners support them, are with them, but there is a lack of sexual attraction, and desire decreases. Patients with MO realise the situation, believe that their partners are pretending, feel guilty and believe that things could change with bariatric surgery.

Sometime I feel that my wife is repelled by me with all this (pointing to his belly) ... She avoids contact when I'm sweating, the smell.. She denies it but doesn't come near me, and she gets away from me...

(ID24, married, 51 years old)

Single men report that MO is an obstacle to leisure, partying, relating to and enjoying themselves with girls. They cannot move

as they wish, they get tired of walking or dancing, they sit, isolated, while the rest have fun. They then seek friendships on the Internet or on social networks, but when making contact the problem is the same.

To avoid conflicts you stay at home, alone and isolated. They don't like the way I move, how I dance, what can I do? Look after girls' handbags? ... no.

(IDI3, single, 37 years old)

The need to be loved/valued by others is transferred to sexual desire. Self-esteem disorders become desire problems. In the presurgical phase of MO, men do not feel desired, frustration and impotence arise, their resilience decreases, and they shut themselves up and blame themselves, making their partners co-responsible.

I would also like to feel wanted, looked at in the street... but not as a fat man!

(IDI7, married, 50 years old)

Morbid obesity patients see themselves as ugly; monotony becomes a part of their lives; they become invisible to others; and they do not want to go out, have pictures taken of themselves or dress up. As one participant says, their mother or sisters buy them clothes that they do not like, large sizes, out of fashion and very expensive.

I can't find any variety, how do you want me to dress so I can think about conquering a woman. On the contrary, I buy up to three or four identical shirts or trousers, so I don't have to look again.

(IDI21, single, 43 years old)

4.2 | Adapting sexual practices until bariatric surgery

Personal relationships and sexuality are fundamental dimensions of the quality of life of heterosexual men with MO, and they are essential for their physical and psychological well-being. Multiple limitations hinder the enjoyment of sexuality in men awaiting bariatric surgery while they try to adapt, with their partner being their most important support.

4.2.1 | Subtheme 1: With this body I can't: adapting to physical limitations

Morbid obesity makes it difficult to have sexual relations, and together with associated comorbidities, the sexual activity of the couple deteriorates. The main problem according to the participants is the difficulty for sexual movements and postures, with a lack of flexibility and balance, and fatigue and respiratory problems. Knowing their limitations, men do not forget their bodies during the relationship; they cannot lose their inhibitions or abandon themselves to sexual pleasure:

... making love with this belly is complicated. In the beginning she gets on top and fine, then she moves to the side because it bothers her, she grabs my belly, pulls it to one side,... she unconsciously says 'puff',... and that kills it for me.

(IDI1, married, 43 years old)

Morbid obesity patients have trouble sleeping, and they lack oxygen and may need assisted breathing. They also suffer lower back pain and sciatic pain related to being overweight; they have difficulty to dress and undress; or their legs become swollen, limiting their movements in sexual intercourse. They are hot; they sweat in winter; and the folds in their skin bring chafing and redness. As one participant describes, this causes discomfort, distraction, doubt, loss of desire and sexual dissatisfaction.

When I get out of the shower naked I allow my wife to see me and touch me, but soon I start to sweat; it is uncomfortable for me... she does not do it with pleasure.

(IDI16, married, 50 years old)

Participants tell how their bodies limit movement, forcing them to adopt more sexually comfortable positions. They usually lie supine with the woman on top, or both in lateral decubitus. And as one participant says, instead of penetration they explore less limiting practices.

In intercourse you are limited, your belly is in the way, you have to look for other positions, try other things, as you can,... you have to take risks!

(IDI4, married, 47 years old)

Other interviewees were more optimistic as they see sexual relations more broadly beyond intercourse. They have understood that masturbation or oral sex can also be part of sexual practice and even realise that their sexual life being enhanced:

There are many ways to have sex, not only with one person on top of the other,... the mouth, the tongue, the hands,... the kilos don't hinder this.

(IDI5, married, 37 years old)

Other studies suggest that the size of the penis could influence the level of female pleasure during sexual activity. Male MO involves increased abdominal size and suprapubic fat, an excess of fatty tissue that covers the base of the penis. The subjective view of having a small penis, covered by a sagging abdomen, was perceived negatively by men.

The belly comes out of here and... your penis is hidden inside, it is difficult to see and find it... it is more difficult for women to see it.

(IDI6, married, 58 years old)

Morbid obesity also generates physiological alterations at the vascular, musculoskeletal or hormonal levels, and the decrease in sex hormones such as testosterone impairs the erection of the penis. This can be culturally related to a lack of male virility, generating a loss of self-esteem and more problems in sexual relationships. Erectile dysfunction seriously worries men in this phase of obesity and pushes them towards surgery:

I don't know whether it's the kilos, the hormones... the penis doesn't stay hard, it doesn't stiffen at all. Yes, I notice it a lot, it is a reason to take the step (bariatric surgery).

(IDI22, married, 38 years old)

4.2.2 | Subtheme 2: When the flame of desire goes out

Sexual satisfaction refers to the perception/evaluation that a person makes of their sexual life according to the frequency, variety, expectations or enjoyment in the relationship. Heterosexual men with MO perceive a progressive decrease in the frequency and quality of sexual encounters, a loss of body contact that results in personal withdrawal.

In a month we have made love five or six times, we enjoyed it, but it is little. Then we are apart for weeks,... without intimacy (sex). The flame goes out.

(IDI1, married, 43 years old)

Participants acknowledge the loss of desire, which, together with hypogonadism, leads to sexual dysfunction. MO also generates problems to reach orgasm in both members of the couple. Men relate their ability to generate pleasure with the female orgasm; if this is not achieved, concern and loss of security arise. The fear of failing in the sexual act results in avoidance behaviour:

You end up avoiding intercourse... I don't know whether it is psychological, but, although we try, with so much fat we do it wrong (intercourse), and you feel bad if (she) doesn't come.

(IDI6, married, 50 years old)

4.2.3 | Subtheme 3: The partner, support for sexuality in men with MO

When sexual intercourse becomes unpleasant (interrupted intercourse, no orgasm), they feel frustrated. From the outset, the men

hide it from their partner, progressively stop trying, then they talk about it, and both begin to think about surgery. The partner is the fundamental support for heterosexual men with MO in a bariatric surgery programme. Emotional proximity creates a bond that helps them overcome health, image or sexuality problems.

Without a strong emotional component, MO would have separated us. She tells me, it will take place, we will have sex again like we used to! Affection counts for more than aesthetics.

(IDI4, married, 47 years old)

The support of the partner during MO is essential. Our participants maintain communication, talk about what they like or are uncomfortable with in the sexual relationship. In general, they feel respected, and their partner does not make them feel guilty or make negative comments about their body. They fear abandonment but believe that with bariatric surgery, everything will change for the better.

We have a good relationship, we talk about everything, we are very close. Another person would have said to me: 'Don't you want to lose weight?.. Bye, go your own way'. She has always been there, by my side.

(IDI5, married, 37 years old)

The excessive weight of the man interferes in the sexuality of the woman, who is forced to adapt to sexual practices with an obese body. The partner shares concerns and risks, accepts periods of sexual abstinence or repeats the same position. While they await bariatric surgery, MO becomes part of their routine, stress and work, reducing eroticism. Some men and their partners go through a loss of sexual attraction as part of the decline of couples that comes with time and age. When they attempt something, they come up against their limitations:

Sometimes we lose interest (in coitus). We try but don't manage to find the position, it goes well when she lies down (points to the table), I'm standing up and get there ... but we're getting old, everything's fixed, there's no spontaneity.

(IDI15, married, 59 years old)

Knowing the risks, women have a difficult time during sexual intercourse as they fear the man will suffer a stroke, hypertension or a heart attack due to the fact that during sexual intercourse, the men do not relax, worry about symptoms such as dyspnoea or sweating, and have antihypertensive drugs nearby. Aware of the situation, their partner encourages them to undergo bariatric surgery.

My wife has a hard time with any gesture or panting during intercourse. She watches me, scared, she thinks she is going to give me a stroke... I need the surgery now!

(IDI18, married, 42 years old)

5 | DISCUSSION

The aim of our study was to describe and understand the experiences of sexuality amongst heterosexual men diagnosed with MO who are in a bariatric surgery programme. Two main themes emerge from our study: (a) a corporality which is judged and condemned; and (b) adapting sexual practices until bariatric surgery. We access the world through our body (Merleau-Ponty, 2002), and MO modifies vitality and sexual experience in particular (Steffen et al., 2019; Wingfield et al., 2016). According to our results, MO lowers the quality of life of men at a physical, psychological, relationship and sexual level (Haga et al., 2020). Selfconcept and body image disorders are related to MO insecurity, low self-esteem and irritability (Rowland et al., 2016). Although the increase in age is related to conformity with the body and lower expectations of weight loss (Bouzas, Bibiloni, & Tur. 2019). men think that bariatric surgery is the solution to their problems. As with women (Taskin et al., 2019), a positive body image can improve the quality of sexual life, and for this reason, men blame their body (Haga et al., 2020). Heterosexual men with MO seek to improve their health (Barragán et al., 2018), body image and sexual function (Rowland et al., 2016); failure to lose weight (Sharman et al., 2016) and aesthetic reasons (Bertoletti et al., 2019) explain their commitment to bariatric surgery (Quinn-Nilas et al., 2016); and as these beliefs may be unrealistic, they can generate frustration (Homer, Tod, Thomson, Allmark, & Goyder, 2016). Inspired by Merleau-Ponty's notion of consciousness as embodied, participants confirm that MO may be related to loneliness, stigma and social isolation (Albano et al., 2019; Nath, 2019), moving towards self-pity (Ramos et al., 2019).

Cultural practices link body shape to gluttony and lack of discipline (Haga et al., 2020). Heterosexual men with MO experience moral harassment, feel doubt, shyness and have fewer possibilities of finding a partner (Carr et al., 2014; Haga et al., 2020). Postmodern masculinity promotes stereotypes about the body and sexuality (Groven & Engelsrud, 2016); social norms on body appearance/responsibility push men with MO towards bariatric surgery. Participants told us that MO inhibits their sex life, which worsens with hypogonadism, erection problems, premature ejaculation, advanced age and consumption of antidepressants (Steffen et al., 2017). According to our results, excess skin/fat has negative effects on sexual life (Kabu & Özbayır, 2019; Milhausen, Buchholz, Opperman, & Benson, 2015), and hinders mobility, sexual positions and enjoyment (Wu & Berry, 2018). Some studies show that bariatric surgery can improve erectile function, desire and sexual satisfaction in heterosexual men with MO (Arolfo et al., 2020; Pomares-Callejón et al., 2018; Xu, Wu, Zhang, & Pei, 2019) although other studies disagree (Carr et al., 2014; Sarwer et al., 2015). Our participants experience bodily dissonance, a conflict between wanting and not being able to leads to loss of security, desire and interest in sex (Milhausen et al., 2015).

The partner is the fundamental support of heterosexual men with MO as in our results evidence suggests that decision-making

is carried out together (Poulsen et al., 2016). Coinciding with Ferriby et al. (2015), the quality of the relationship decreases prior to surgery, and both must adapt their sexuality to the limitations of MO. Being overweight can unite or separate the couple (Ledyard & Morrison, 2008), but men feel supported in the struggle to preserve their sexuality (Haga et al., 2020). Coinciding with our results, candidates for bariatric surgery report anxiety and avoidance of romantic or sexual relationships (Pratt et al., 2016), expecting improvements in their frequency, and the comfort and satisfaction they provide after surgery (Kabu & Özbayır, 2019; Steffen et al., 2017). Postbariatric surgery experiences range from improvements in sexual functioning (Steffen et al., 2019) to personality changes (Wallwork, Tremblay, Chi, & Sockalingam, 2017). Although men with MO can improve their sexuality after bariatric surgery (Pomares-Callejón et al., 2018), there is a lack of research using a gender approach (Cohn et al., 2019; Edward et al., 2018; Pratt et al., 2016).

5.1 | Limitations

Including participants from other ethnic groups in the study could have given different results. As all participants declared they were heterosexual and monogamous, findings could be different for people with other types of sexual orientation or when both members of the couple suffer from MO. Men with MO are often diagnosed with comorbidities that can also lead to sexual dysfunction, and therefore, this is an important confounding factor that should be considered. The fact that both interviewers were women may also have influenced certain answers. In addition, interviews with MO men's sexual partners could lead to different and important results.

6 | CONCLUSION

Heterosexual men with MO in a bariatric surgery programme have severe limitations and comorbidities that deteriorate their physical, mental and sexual health. MO makes men reject their body, which they blame for their physical, sexual, relational and existential deficiencies. Along with a negative body image, insecurity and low self-esteem, MO causes the deterioration of self-concept, loss of desire, limitations in daily sexual life and unhappiness. Heterosexual men with MO cannot respond to the demands of the traditional male role and the new masculinities, which are focused on the body image and care for the body. Our results corroborate the severe limitations that MO imposes on the life of men and their partners, physical limitations, psychological problems and the loss of social and sexual life. Although the heterosexual men with MO fear losing their partner, she is their fundamental support. The adaptation of their sexuality and joint decision-making is crucial to confront the process of waiting for bariatric surgery, a process in which they place all their hope.

7 | RELEVANCE FOR CLINICAL PRACTICE

Bariatric nurses provide comprehensive care to patients with MO, including care to patients undergoing bariatric surgery. Bariatric nurses are an important motivating resource before, during and after the surgical procedure, giving support to patients, partners, family and others. Understanding how men with MO deal with their sexuality can help nurses in their evaluation and care. Private and safe environments are required for discussion about sexuality between nurses, patients and partners throughout the surgical procedure. In the presurgical evaluation, it is important to guide partners to adapt their sexuality and inform of possible changes in behaviour associated with the weight loss after bariatric surgery. During the postoperative and recovery periods, bariatric nurses can report on the return to sexual activity, care for the scars and skin, which are vital for the healing and the improvement of the self-image. Furthermore, education, information and the development of protocols can help the professionals of the bariatric surgery team to overcome difficulties in addressing a sensitive topic such as sexuality.

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CONFLICT OF INTEREST

The authors declare no conflicts of interest.

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REFERENCES

Albano, G., Rowlands, K., Baciadonna, L., Lo Coco, G., & Cardi, V. (2019). Interpersonal difficulties in obesity: A systematic review and meta-analysis to inform a rejection sensitivity-based model. Neuroscience & Biobehavioral Reviews, 107, 846–861. https://doi.org/10.1016/j.neubiorev.2019.09.039

Aranceta-Bartrina, J., Pérez-Rodrigo, C., Alberdi-Aresti, G., Ramos-Carrera, N., & Lázaro-Masedo, S. (2016). Prevalencia de obesidad general y obesidad abdominal en la población adulta española (25-64 años) 2014–2015: Estudio ENPE. *Revista Española De Cardiología*, 69(6), 579–587. https://doi.org/10.1016/j.recesp.2016.02.010

Arolfo, S., Scozzari, G., Di Benedetto, G., Vergine, V., & Morino, M. (2020). Surgically induced weight loss effects on sexual quality of life of obese men: A prospective evaluation. Surgical Endoscopy. Advance online publication. https://doi.org/10.1007/s00464-019-07356-y

Baillot, A., Mampuya, W. M., Comeau, E., Méziat-Burdin, A., & Langlois, M. F. (2013). Feasibility and impacts of supervised exercise training

- in subjects with obesity awaiting bariatric surgery: A pilot study. *Obesity Surgery*, 23(7), 882–891. https://doi.org/10.1007/s11695-013-0875-5
- Barragán, R., Rubio, L., Portolés, O., Asensio, E. M., Ortega, C., Sorlí, J. V., & Corella, D. (2018). Qualitative study of the differences between men and women's perception of obesity, its causes, tackling and repercussions on health. *Nutrición Hospitalaria*, 35(5), 1090-1099.
- Bates, J. N., Pastuszak, A. W., & Khera, M. (2019). Effect of body weight on sexual function in men and women. *Current Sexual Health Reports*, 11(1), 52–59. https://doi.org/10.1007/s11930-019-00192-0
- Bertoletti, J., Galvis, M. J., Aparicio, M. S., Bordignon, S., & Trentini, C. (2019). Body image and bariatric surgery: A systematic review of literature. *Bariatric Surgical Practice and Patient Care*, 14, 92. https://doi.org/10.1089/bari.2018.0036
- Bouzas, C., Bibiloni, M. D. M., & Tur, J. A. (2019). Relationship between body image and body weight control in overweight ≥55-year-old adults: A systematic review. *International Journal of Environmental Research and Public Health*, 16(9), 1622. https://doi.org/10.3390/ijerp h16091622
- Carr, D., Murphy, L. F., Batsoin, H. D., & Springer, K. W. (2014). Bigger is not always better: The effect of obesity on sexual satisfaction and behavior of adult men in the United States. *Men and Masculinities*, 16(4), 452–477. https://doi.org/10.1177/1097184X13502651
- Chou, D., Cottler, S., Khosla, R., Reed, G. M., & Say, L. (2015). Sexual health in the International Classification of Diseases (ICD): Implications for measurement and beyond. *Reproductive Health Matters*, 23(46), 185– 192. https://doi.org/10.1016/j.rhm.2015.11.008
- Cohn, I., Raman, J., & Sui, Z. (2019). Patient motivations and expectations prior to bariatric surgery: A qualitative systematic review. *Obesity Reviews*, 20(11), 1608–1618.
- Edward, K. L., Hii, M. V., Hennessy, J., & Thompson, L. (2018). Personal descriptions of life before and after bariatric surgery from overweight or obese men. *American Journal of Mens Health*, 12(2), 265–273.
- Engin, A. (2017). The definition and prevalence of obesity and metabolic syndrome. Advanced in Experimental Medicine and Biology, 960, 1–17.
- Ferriby, M., Prat, K. J., Balk, E., Feister, K., Noria, S., & Needleman, B. (2015). Mariage and weight loss surgery: A narrative review of patient and spousal outcomes. *Obesity Surgery*, 25(12), 36-42.
- Groven, K. S., & Engelsrud, G. (2016). Negotiating options in weight-loss surgery: "Actually I didn't have any other option". *Medicine Health Care and Philosopy*, 9(3), 361–370.
- Haga, B. M., Furnes, B., Dysvik, E., & Ueland, V. (2020). Putting life on hold: Lived experiences of people with obesity. *Scandinavian Journal* of Caring Sciences, 34, 514–523. https://doi.org/10.1111/scs.12756
- Homer, C. V., Tod, A. M., Thomson, A. R., Allmark, P., & Goyder, E. (2016). Expectations and patients' experiences of obesity prior to bariatric surgery: A qualitative study. British Medical Journal Open, 6(2), e009389.
- Kabu Hergül, F., & Özbayır, T. (2019). I am as normal as everyone now: examination of experiences of patients undergoing bariatric surgery according to Roy's adaptation model: A qualitative study. Clinical Nursing Research, Advance online publication. https://doi.org/10.1177/1054773819880291
- Landecho, M. F., Valentí, V., Moncada, R., & Frühbeck, G. (2017). Eligibility and success criteria for bariatric/metabolic surgery. Advances in Experimental Medicine and Biology, 960, 529–543.
- Lecube, A., Monereo, S., Rubio, M. A., Martínez-de-Icaya, P., Martí, A., Salvador, J., ... Casanueva, F. F. (2017). Prevention, diagnosis, and treatment of obesity. 2016 position statement of the Spanish Society for the Study of Obesity. *Endocrinology*, *Diabetes and Nutrition*, 64(S1), 15–22.
- Ledyard, M. L., & Morrison, M. C. (2008). The meaning of weight in marriage: A phenomenological investigation of relational factors involved in obesity. *Journal of Couple & Relationship Therapy*, 7(3), 230– 247. https://doi.org/10.1080/15332690802237946

- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage.
- Lynch, A. I., McGowan, E., & Zalesin, K. C. (2018). "Take me through the history of your weight": Using qualitative interviews to create personalized weight trajectories to understand the development of obesity in patients preparing for bariatric surgery. *Journal of the Academy of Nutrition and Dietetics*, 118(9), 1644–1654. https://doi. org/10.1016/j.jand.2017.12.008
- Mazer, L., & Morton, J. M. (2018). The obesity epidemic. In K. Reavis, A. Barrett, & M. Kroh (Eds.), *The SAGES manual of bariatric surgery* (pp. 81–92). New York, NY, Cham: Springer.
- Mechanick, J. I., Kushner, R. F., Sugerman, H. J., Gonzalez-Campoy, J. M., Collazo-Clavell, M. L., ... Guven, S. (2009). American Association of Clinical Endocrinologists, The Obesity Society, and American Society for Metabolic & Bariatric Surgery Medical Guidelines for clinical practice for the perioperative nutritional, metabolic, and nonsurgical support of the bariatric surgery patient. Obesity (Silver Spring), 17(Suppl 1), S1-70.
- Mechanick, J. I., Youdim, A., Jones, D. B., Timothy, W., Hurley, D. L., Molly, M., ... Brethauer, S. (2013). Clinical practice guidelines for the perioperative nutritional, metabolic, and nonsurgical support of the bariatric surgery patient 2013 update: Cosponsored by American Association of Clinical Endocrinologists, the Obesity Society, and American Society for Metabolic & Bariatric Surgery. Surgery for Obesity and Related Diseases, 9(2), 159–191.
- Merleau-Ponty, M. (2002). Phenomenology of perception. New York, NY: Routledge.
- Milhausen, R. R., Buchholz, A. C., Opperman, E. A., & Benson, L. E. (2015). Relationships between body image, body composition, sexual functioning and sexual satisfaction among heterosexual young adults. Archives Sexual Behavior, 44(6), 1621–1633. https://doi.org/10.1007/s10508-014-0328-9
- Nath, R. (2019). The injustice of fat stigma. *Bioethics*, 33(5), 577-590. https://doi.org/10.1111/bioe.12560
- Pomares-Callejón, M. A., Ferrer-Márquez, M. M., & Solvas-Salmerón, M. J. (2018). Cambios en la salud sexual de los pacientes obesos tras cirugía bariátrica [Article in Spanish]. *Cirugía y Cirujanos*, 86(3), 255-260.
- Poulsen, L., Klassen, A., Jhanwar, S., Pusic, A., Roessler, K. K., Rose, M., & Sørensen, J. A. (2016). Patient expectations of bariatric and body contouring surgery. *Plastic and Reconstructive Surgery. Global Open*, 4(4), e694. https://doi.org/10.1097/GOX.00000000000000077
- Pratt, K. J., Balk, E. K., Ferriby, M., Wallace, L., Noria, S., & Needleman, B. (2016). Bariatric surgery candidates peer and romantic relationships and associations with health behaviors. *Obesity Surgery*, 26(11), 2764–2771. https://doi.org/10.1007/s11695-016-2196-y
- Quinn-Nilas, C., Benson, L., Milhausen, R. R., Buchholz, A. C., & Goncalves, M. (2016). The relationship between body image and domains of sexual functioning among heterosexual, emerging adult women. Sexual Medicine, 4(3), e182–e189. https://doi.org/10.1016/j.esxm.2016.02.004
- Ramos, X., Forhan, M., Caulfield, T., Sharma, A. M., & Raine, K. D. (2019). Addressing internalized weight bias and changing damaged social identities for people living with obesity. Frontiers in Psychology, 10, 1409.
- Rowland, D. L., McNabney, S. M., & Mann, A. R. (2016). Sexual function, obesity, and weight loss in men and women. Sexual Medicine Reviews, 5(3), 323–338. https://doi.org/10.1016/j.sxmr.2017.03.006
- Sabench, F., Domínguez-Adame, E., Ibarzabal, A., Socas, M., Valentí, V., García, A., ... (2017). Quality criteria in bariatric surgery: Consensus review and recommendations of the Spanish Association of Surgeons and the Spanish Society of Bariatric Surgery. Cirugía Española, 95(1), 4-16.
- Sarwer, D. B., Spitzer, J. C., Wadden, T. A., Rosen, R. C., Mitchell, J. E., Lancaster, K., ... Christian, N. J. (2015). Sexual functioning and

- sex hormones in men who underwent bariatric surgery. *Surgery Obesity Related Disease*, 11(3), 643–651. https://doi.org/10.1016/j.soard.2014.12.014
- Sfahani, S. B., & Pal, S. (2019). Does metabolic syndrome impair sexual functioning in adults with overweight and obesity? *International Journal of Sexual Health*, 31(2), 170–185. https://doi.org/10.1080/19317611.2019.1611688
- Sharman, M. J., Venn, A. J., Hensher, M., Wilkinson, S., Palmer, A. J., Willanski, D., & Douglas, S. (2016). Motivations for seeking bariatric surgery: The importance of health professionals and social networks. Bariatric Surgical Practice and Patient Care, 11(3), 104–109. https://doi.org/10.1089/bari.2016.0004
- Srivastava, G., & Apovian, C. (2018). Future pharmacotherapy for obesity: New anti-obesity drugs on the horizon. *Current Obesity Reports*, 7(2), 147–161. https://doi.org/10.1007/s13679-018-0300-4
- Steffen, K. J., King, W. C., White, G. E., Subak, L. L., Mitchell, J. E., Courcoulas, A. P., ... Huang, A. J. (2017). Sexual functioning of men and women with severe obesity before bariatric surgery. Surgery for Obesity and Related Diseases, 13(2), 334–343.
- Steffen, K. J., Wendy, C. K., King, W. C., White, G. E., Subak, L. L., Mitchell, J. E., Courcoulas, A. P., ... Huang, A. J. (2019). Changes in sexual functioning in women and men in the 5 years after bariatric surgery. *JAMA Surgery*, *154*(6), 487–498.
- Taskin, F., Karakoc, A., & Demirel, G. (2019). The effect of body image on sexual quality of life in obese married women. *Health Care for Women International*, 40(4), 479–492.
- Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): A 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*, 19(6), 349–357.
- Wallwork, A., Tremblay, L., Chi, M., & Sockalingam, S. (2017). Exploring partners' experiences in living with patients who undergo bariatric surgery. *Obesity Surgery*, 27, 1973–1981.

- Wingfield, L. R., Kulendran, M., Laws, G., Chahal, H., Scholtz, S., & Purkayastha, S. (2016). Change in sexual dysfunction following bariatric surgery. *Obesity Surgery*, 26(2), 387–394.
- World Health Organization (WHO) (2006). Defining sexual health: Report of a technical consultation on sexual health (pp. 28-31). Geneva, Switzerland: WHO.
- World Health Organization (WHO) (2017). Obesity and overweight.

 Retrieved from http://www.who.int/mediacentre/factsheets/fs311/
- Wu, Y. K., & Berry, D. C. (2018). Impact of weight stigma on physiological and psychological health outcomes for overweight and obese adults: A systematic review. *Journal of Advanced Nursing*, 74(5), 1030–1042.
- Xu, J., Wu, Q., Zhang, Y., & Pei, C. (2019). Effect of bariatric surgery on male sexual function: A meta-analysis and systematic review. Sexual Medicine, 7(3), 270–281.

SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section.

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