





# Experiences of women undergoing abdominoplasty in the public sector: a qualitative study

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Keywords: abdominoplasty, back pain, abdominal wall, delivery of healthcare, lipectomy

Submitted: 2021 May 2 AEST Accepted: 2021 May 25 AEST Published: 2022 March 31 AEST

DOI: <https://doi.org/10.34239/ajops.v5n1.309>

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## Australasian Journal of Plastic Surgery

Vol 5, Issue 1, 2022 | March 31 2022 AEST

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### Introduction

This study was designed to improve understanding of the experiences of women undergoing abdominoplasty in a public hospital setting, including their experience of processes of care, surgical treatment and outcomes of surgery.

### Methods

This was a prospective, qualitative study, with one-to-one interviews with women, transcription of interviews and development of themes.

### Results

Twenty interviews were carried out with 16 women, with four women being interviewed before and after surgery and the remaining 12 being interviewed one time only. Messages emerging from the interviews included gratitude for treatment in the public sector, uncertainty associated with waiting times and surgeon allocation, and varied satisfaction with outcomes. This article also explores the evidence for the association between physical symptoms and rectus diastasis (separation of the rectus abdominis muscles) as well as mental health improvement.

### Conclusion

Women undergoing abdominoplasty in the public sector are not a homogenous group, either in their motivations for surgery or their reported outcomes. This qualitative study found evidence for improvement in physical symptoms and psychological wellbeing in women undergoing abdominoplasty, which supports existing quantitative studies, but also highlights a need for clear information for public sector patients, especially relating to scars, and for liaison psychiatry. Criteria-based assessment contributes an additional burden for these patients.

## Introduction

There has been a recent transition in the way women seeking abdominoplasty have been treated in the Australian public healthcare system. The decision to offer publicly funded abdominoplasty used to relate solely to the judgement of the referring general practitioner (GP) and the assessment of the plastic surgeon. More recently, the discretion of individual specialists has been replaced by state governments and criteria-based policies in most Australian public hospitals. In 2009, Pearson and colleagues published a systematic review of policy on exclusions, and exemptions from exclusion, for those seeking abdominoplasty.<sup>1</sup> At that time they noted there were no qualitative studies in this field. There has been little published in the literature about how the imposition of a criteria-based system has affected those seeking and undergoing treatment, over and above the effect of the surgery itself. While there have been previous qualitative studies on abdominoplasty,<sup>2-4</sup> they have not examined the influence of the process of care associated with Australian restrictions in the public healthcare setting. The aim of this study was to understand the experiences of women undergoing abdominoplasty in the Australian public healthcare setting and how these experiences differ from the findings of previous studies. Furthermore, this study aimed to explore the evidence for the association between physical symptoms and rectus diastasis, and the effect of abdominoplasty on physical and mental health.

## Methods

### Model of care

Flinders Medical Centre is a teaching hospital with onsite outpatient services. Initial consultation for patients requesting abdominoplasty is by a specialist plastic surgeon. As well as conducting a history and examination, the surgeon is required to assess the patient against the criteria of the SA Health elective surgery exclusion and restrictions policy (**Table 1**) and only place on the waiting list those who meet the criteria. At the time these participants were listed for surgery, the criteria were disabling or persistent physical discomfort or intertrigo (2011 version of the policy). Psychological distress is not a criterion on which selection for surgery can be made, but patients commonly have psychological problems associated with their physical presentations. The service has a close relationship with a liaison psychiatrist (RL) and refers appropriate patients. There are elective

surgery officers employed in the hospital whose role is to ensure that patients meet the SA Health elective surgery policy<sup>5</sup> and to monitor waiting list patients, over and above the usual admissions office processes. Surgery for these patients is carried out under the care of a named specialist, but parts or all of the procedure may be performed by a trainee under supervision. Postoperative care is by a mixture of trainees, junior doctors and consultants.

### Research design and recruitment

This was a qualitative cohort study, with participants being recruited from the surgical waiting list and outpatient lists. Potential participants were provided with a participant information sheet inviting them to contact the qualitative interviewer (KF) directly for interview. This direct communication ensured that surgeons could not influence participation. Participants were treated as a single group and not divided up by their physical indication for surgery. Participants who were preoperative at the time of recruitment, whose surgery date fell in the early part of the study period, and who expressed an interest in further participation were re-interviewed following their surgery. Interviews were conducted either face-to-face or via telephone and transcribed. The interview schedule used to guide the conversation is available as a supplementary file (S1).

The study was approved by the Southern Adelaide Local Health Network human research ethics committee [approval no. 206.17].

### Data analysis

Transcripts were de-identified by replacing interviewee names with pseudonyms. Coding was completed inductively (ie codes were developed from scratch, rather than having a pre-formed list of topics) by one researcher. Co-coding was undertaken on three transcripts to cross-check emerging codes and support the development of themes. Once all 20 interviews were coded using NVIVO 11 software (QSR International, Level 5, Suite 5.11 737 Burwood Road Hawthorn East, Vic Australia 3123), key themes were identified.

## Results

Twenty interviews were completed between 2017 and 2020 with 16 women participating. Four were interviewed both pre- and postoperatively, nine in the postoperative period only and three in the preoperative period only. Women had typically

**Table 1: Differing criteria for abdominoplasty within the SA Health elective surgery policy directive**

SA Health elective surgery policy directive version	Criteria for offering abdominoplasty in the public hospital system
August 2011*	<ul style="list-style-type: none"> <li>· Disabling or persistent physical discomfort</li> <li>· Intertrigo</li> </ul>
July 2018#	<ul style="list-style-type: none"> <li>· Wedge excision of abdominal apron, or radical abdominoplasty, or circumferential lipectomy, if:               <ul style="list-style-type: none"> <li>○ there is intertrigo or another skin condition that risks loss of skin integrity and has failed 3 months of conventional (or non-surgical) treatment; and</li> <li>○ the abdominal apron / redundant skin and fat interfere with the activities of daily living; and</li> <li>○ the weight has been stable for at least 6 months following significant weight loss (at least 5 body mass index points) before the lipectomy</li> </ul> </li> <li>· Lipectomy, radical abdominoplasty in the context of a demonstrated anterior abdominal wall defect that is a consequence of the surgical removal of a large intra-abdominal or pelvic tumour</li> </ul>

\*2011 policy is no longer available online. #2018 policy available at [https://www.sahealth.sa.gov.au/wps/wcm/connect/3d568a77-a030-437a-957e-9b60bb143341/Directive\\_Restricted\\_Elective\\_Surgery\\_v1.2\\_22.11.2018.pdf](https://www.sahealth.sa.gov.au/wps/wcm/connect/3d568a77-a030-437a-957e-9b60bb143341/Directive_Restricted_Elective_Surgery_v1.2_22.11.2018.pdf)

waited 2.5–6.5 years to access surgery, meaning that most were subject to the 2011 version of SA Health restrictions and prior to the stricter 2018 version (**Table 1**).

Interview summaries are shown in **Table 2**. Key messages arising from the interviews were that motivations for surgery were diverse and complex, there were major hurdles to accessing treatment, waiting on the surgical waiting list was variably burdensome, treatment in the public system may differ from that in the private system, abdominoplasty can be beneficial in terms of both physical and psychological outcomes and that satisfaction with results is variable. These messages are expanded upon under the theme headings below (patient names have been replaced with pseudonyms).

### Theme one: motivations for surgery

Although the assessing surgeon was clearly focused on physical symptoms and the potential benefit of surgery to relieve those, the interviews showed broad heterogeneity in the motivations for surgery including physical, medical, emotional and psychosocial. This is illustrated in the following interview excerpts.

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*"The skin was a reminder of how big I really was and it was almost like I'd been through all this work ... Once you get to your desired weight and everything—I actually got down to the weight which was my perfect weight for my height and I looked anorexic, so I actually put some on but, yeah, it was just the psychological side of it all. I basically had a marriage breakdown because of losing all the weight and everything like that as well and then to have the apron of skin was very uncomfortable."* **Heather**

*"I was exercising and was also going to a physio as well to help me to do certain exercises. Then, yeah, it was probably about a year and a half—it was after my son's first birthday, but I can't—it's all a blur now, I can't remember if it was the physio or the GP but someone was like, 'Yeah, I can still fit four fingers in there. That's not going to come together any time soon and probably not without some sort of surgical intervention!'"* **Prue**

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**Table 2: Heuristic table documenting interviews**

Colours in final column indicate feelings regarding outcome

green: happy with result, orange: some reservations about result, red: dissatisfaction with result

Pseudonym	Pre-operative interview	Post-operative interview	Status at time of interview	Background to request for abdominoplasty	Summary of pathway to surgery and post-surgical experience	Participant responses to the question: Was it worth it?
Marielle		X	Interviewed 5 months after surgery Waited 5 years	Twins Stay-at-home mum (primary school kids)	Public Couldn't afford private (estimated cost of \$30,000) Investigated it through private system after a friend had it done, who then put her on a public waiting list	'It was worth it. Muscles better, can wear clothes, lights on, no floppy'
Jill		X	Interviewed 6 months after surgery Waited 7 years	Weight loss Rash A bit older Two C-sections: GP advised muscles wouldn't go back without surgery Stay-at-home mum (primary + high-school kids)	Public Found out about abdominoplasty via GP Was put on a waiting list and asked to get to a certain body mass index, which was psychologically very difficult Reason for seeking surgery transitioned from weight loss to the rash Didn't call it 'plastic surgery' with some family members, emphasised medical impact and rash	'Rash is gone, but I don't feel better about myself. Well, some days I do, but still have some fat around my pubic area, my boobs are still huge. My clothes do fit better though'
Loretta	X	X	Interviewed 2 weeks before surgery Waited 6-7 years Re-interviewed 5 months following surgery	Long life of weight loss and gain, had gastric sleeve in 2011 (left her with a 'sugar bag'—significant weight that presses on her bladder, bowel, blood vessels, etc.) Retired It's 'my time' now	Combined with hernia repair Didn't call it 'plastic surgery', emphasised the hernia repair Didn't have private health insurance Trusted the public system, although thought some doctors don't have enough empathy or cohesive communication at times The waiting caused a bit of anxiety Didn't want to go private on principle (estimated \$12,000) because they already contributed so much to the private sector via fees when younger: happy to make a co-payment to the public system Fell off a ladder, which further postponed the surgery Possibly found out about it via bariatric surgeon	Happy she had it done, although she feels that it has left her with a 'seal nose' where the scar comes together. At the time of re-interview, she was on a waiting list to be assessed for a scar revision
Zofia		X	Interviewed 2 months after surgery Waited 4-5 years	Lost 25 kg over life Felt like everyone was staring at her, went through depression Wanted a flat tummy to wear clothes more easily Relationship and intimacy issues: hides from partner when changing (remains unresolved)	Found out about surgery via a friend At initial consult was told she needed to lose another 5-6 kg, found this very motivating Was a bit nervous about the scar Had a medical incident that increased the waiting time for the surgery (postponed a second time because of urinary tract infection) Feels mental health is as important as physical health Would be open to counselling as a follow-up to reconcile poor result / incongruence with expectations	Hates it, cried through most of the interview (dog ears) Doesn't feel psychosocial support would help because it's the body that's the problem, not her mind Keeps ringing up Flinders Medical Centre to see if they can do a revision

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Rebecca		X	Interviewed 2 months after surgery Waited 5 years	Had twins and was quite large with significant back pain  Psychological: hated her partner's attention to her, and how she looked in the mirror  Isn't a big fan of cosmetic surgery, but wouldn't mind some implants: can't justify being out of pocket for it  Sense of 'deservingness' to get the surgery because of twin pregnancy	Couldn't justify the expenditure privately so was very grateful to get it done in public system  A friend let her know about it  Very assertive: got on the waitlist within 5-6 months of giving birth  Happy with the waiting time, which coincided with when the kids started school: 'my time to focus on myself again'  Found surgeon's focus on psychological and emotional domains validated her getting the surgery done	Back pain gone  Good to look down at a flat belly  Still has saggy boobs  Looking forward to being able to build up muscles and have a better core
Barbara		X	Interviewed 3 months after surgery Waited 3 years	Weight loss with lap banding, had a big apron of skin that was causing rashes (privately done): it was this surgeon that referred her to the public system for abdominoplasty  Inefficient organisation of paperwork, appointments, etc.	Feels the surgery should not be elective or classed as cosmetic: was frustrated she had to buy her own binder (cost of \$85)  Couldn't afford this surgery on the private system and can't afford new clothes: living off the pension (in a privately owned home)  Didn't feel a need for a new belly button, but they gave her one anyway  Found out about it via bariatric surgeon	Happy with majority of results although feel that there are some small dog tags on the side, will follow up on this with surgeon when possible  Feels as if 'I got my body back, and can live how I want to now'
Robyn		X	Interviewed 2 years after surgery Waited 18 months	Had the surgery after having 2 kids and lap banding done privately to lose weight  'I'm a mum, my days of bikinis are way gone'  Couldn't afford this surgery on the private system	Waiting time worked out ok for her as she was waiting for her kids to grow up and to move closer to her family  Her sister got the surgery done privately and felt really rushed into it  Found out about it via a bariatric surgeon	'The scar is hideous, and I've got dog ears, but I don't have to tuck the skin in any more and that's really what I was aiming for'  Much happier because 'I don't have to tuck anything in'  'I'm more active with the kids'
Trudy		X	Interviewed 7 months after surgery Waited ~6 years	Long history with weight loss, plus last baby destroyed muscles  Called it her 'gunt' that would go around with her everywhere: was significant to her that she could see her fanny when she showered again  Heard about it through online and social media groups	Asked for a referral from doctor 'to get boobs reduced and tummy tucked. Was called in for boobs 2013 and got them done 2014'  Same surgeon said she was still too overweight for tummy surgery at that time, but she lost 39 kg over next year, proving she was a good candidate, so was put back on the waiting list  Couldn't afford it through the private system	Reckons it's the best thing she's ever done  Has improved her confidence and mental health, made it easier for her to exercise  Now wants to get her arms done



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Pseudonym	Pre-operative interview	Post-operative interview	Status at time of interview	Background to request for abdominoplasty	Summary of pathway to surgery and post-surgical experience	Participant responses to the question: Was it worth it?
Annette	X	X	Interviewed the day before her surgery Waited: 4.5–5 years Re-interviewed 5 months after surgery	Had 4 children, and was very ill during pregnancies, so developed hernias from vomiting all the time Describes the skin as flowing in the ocean during sex: affects intimacy Looking forward to closing the chapter of baby-body	Heard about it from other mums: that it was available in public system; couldn't afford the \$8000 gap on the private system Still didn't know who her surgeon was going to be the day before: this frustrated her After the surgery was staying in a room of old men, who were vocal, and she felt humiliated Feels the surgery didn't achieve its goals, so now is paying for private revision with gap of around \$5000: describes this as stressful and is going to have to take work off, etc.	Completely regrets it, describes it as a nightmare where she is now going to have to spend thousands of dollars fixing the scar Wishes she'd never got it done, even if she was still living with the pain and discomfort caused by the hernia (which is fixed) Describes her body as feeling wrong: muscles, skin, scar, digestion, all of it
Tricia	X		Interviewed while on waiting list for surgery: no date scheduled Waited 18 months at time of interview	Had a hysterectomy that caused floppiness in her stomach Had to lose some weight to make the eligibility criteria Rural Is an entertainer: wants to wear dresses, and feels embarrassed about her floppy tummy	Gets rashes: smells and stings Interrupts intimacy: doesn't want her partner to see it Found out about the surgery through GP when talking about her unhappiness with her body Range of caring responsibilities for her kids and their kids Doesn't feel like counselling would be useful for her: she knows what's going to help, to get her stomach done	N/A
Heather		X	Interviewed 6–7 years postoperative Waited 6–12 months	Had a gastric band and lost 50 kg, so had a big apron of skin (ended up being 2.5 kg removed) Almost felt worse after the weight loss because of how the skin looked and felt Friends and family thought she was crazy: had been through enough now	Couldn't afford it on the private system (got bariatric surgery privately though) Wasn't mentally prepared for how significant the surgery was, surprised by the size of scar Thinks counselling would have been helpful for her Found out about surgery via a bariatric surgeon Felt underprepared for how major the surgery was, especially the scar Doesn't know what she would have done if she hadn't had it done but also sad she had to go to those lengths to be happy Described suicidality in regard to how her body felt, and the need for the surgeries	Happy with how it looked Had to have minor revisions for dog ears and the wound coming apart Met everything she expected, was more 'psychologically effective' than she thought it was going to be: helped her feel good about herself again
Kirsty	X	X	Interviewed 2 weeks before surgery (didn't have a date scheduled at the time but knew it would be within a year) Waited 4 years Re-interviewed 4 months after surgery	Really bad rash from apron of skin after childbirth, skin splits, smells, affects everything I do Has always hated her body and hoped this would give her more confidence as a bonus Lost 30 kg at some point	Dermatologist referred her for the surgery Never really believed it would happen until they rang her for a consult Couldn't have afforded it on the private system. Is very grateful it's happening Emphasised how significant the surgery is: such a significant recovery Her rash flared up everywhere on her body post surgery, so that was frustrating, but settled over time	Area of infected skin is gone Surgery and recovery went very well Described feeling 'normal' or 'human' again Felt she couldn't have paid for better surgery or service Despite her feeling the scar was sewn up by 2 different surgeons

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Pseudonym	Pre-operative interview	Post-operative interview	Status at time of interview	Background to request for abdominoplasty	Summary of pathway to surgery and post-surgical experience	Participant responses to the question: Was it worth it?
Val	X		Interviewed while on waiting list (no date scheduled) Waited ~2 years	Weight loss with lap banding over last 5–6 years Now has a blob that bothers her (also describes herself as having batman wings which were operated on 2 years ago publicly) Feels the surgery will be good for her self-esteem	Was waiting for a long time and thought they'd forgotten about her, but then they rang her out of the blue When she went back for an abdo consultation, the surgeon was a bit mad she'd gained weight Found out about surgery via a bariatric surgeon Didn't tell anyone about the surgery because she didn't feel they'd approve, 'because I'm an old bugger, but it was for me'	N/A
Lynette		X	Interviewed ~30 years after surgery	Birth and pregnancy: was full term size with her daughter at 6 months and kept growing (age 23 years) Describes being concerned with her body at 23, because it was part of her identity 'Emerging from motherhood made me worry a bit more about my body, so I saved up the money for the surgery'	Found the surgery very painful At the time she was embarrassed to have it done, but now feels more comfortable with the decision Had a subsequent pregnancy, which the incisions coped with very well Was surprised by how significant the surgery was, the pain and scarring Re-married, had to negotiate being naked with someone again	Felt her surgery silhouette looked a lot better, but still didn't feel comfortable to show her husband the scar and look, etc. Didn't feel the muscles were addressed well, wasn't able to regain tone after the surgery
Prue	X		Interviewed while on waiting list (no confirmed date) Waited 4.5 years so far	After 3 kids, her muscles hadn't come back together Is small framed and is often asked by people how much longer it is before the next baby arrives. Finds this conversation difficult Couldn't afford surgery on the private system Feels she can't talk to any of her friends about it because they're bigger than her	Was approved for full abdominoplasty based on muscle separation (had been seeing GP and physio about this) GP referred her when realising her muscles hadn't come back together after surgery (had been attempting this for a full year, and was still able to fit 4 full fingers in the muscle gap) Surgeon based his decision for her to receive surgery around active citizenship Had also heard about the surgery from a social media group called Running Mums Australia	N/A
Rachel	X	X	Interviewed 2 months before surgery Waited 3.5 years Re-interviewed 4 months post-surgery	Always struggled with weight, had 2 kids (both C-sections), lost weight, had an apron that involved a rash—was eligible across several criteria but didn't class these as medical reasons—felt there were other people who should have got the surgery before her	Works at a GP office, and one of the GPs told her she would be eligible Initial surgeon broke his elbow just before her scheduled date, but she wasn't informed about this: surgery was delayed 6 months because of this Interrupts confidence, and is hot and sweaty and gross in summer Very understanding of the public system run around because she's so thankful she'll be able to get the surgery Felt everything went textbook Thinking about going overseas with a friend who's going through a divorce to get her boobs done Felt like she wasn't as worthy as other candidates because she didn't seem to be so severe	When she first saw her stomach after the operation she felt relief, because 'I'm not that person any more': the stretchy skin had gone Feels it's benefited the family, her mental wellbeing has had positive impacts for everyone Doesn't feel she's wasted time, but wished this had been done ages ago so she could be who she wanted to be Back pain is gone now

## Theme two: accessing treatment and waiting on waiting list

In terms of ability to access treatment in the public system, there was wide variation. The following excerpt reflects gratitude for abdominoplasty being available in the public system.

*"I'm just amazed that I live in a country where this has been able to happen when financially we would've never been able to pay for this probably, or not for a very long time. Who knows how many years I would go on just having this back pain all the time."*

**Rebecca**

Other excerpts cover the challenges of long waiting periods prior to surgery, and the fact that being in limbo is difficult to plan around.

*"Twelve months came around and I hadn't heard anything." **Marielle***

*"I thought, a couple of years but, yeah, it's been about four and a half now. I've just sort of said to them, 'I don't want to be pushy. Hubby's got to book leave. We've got a family holiday in November and I really don't want it to coincide with that' ... Every now and then I think, 'Oh gosh, it would be nice to have it done and to put it behind me.'" **Prue***

Some interviewees were cognisant of the hospital sometimes needing to change surgery dates to accommodate emergency cases.

*"I could go on probably a bit longer with the hernia but, you know, I've waited my time, to a reasonable amount I think, but if someone showed up ahead of me and was in excruciating pain, whether it be a child or whatever, I would say, well, I'm happy to wait another X amount of time, but it has to come to something in the end." **Loretta***

Interviewees knew that there were eligibility guidelines that could approve the surgery, and there were varied levels of acceptance/understanding around this.

*"Well, not being approved for the surgery would have an impact on my life because I'd think—I would hold a grudge against the government probably and think well, I'm being victimised." **Val***

## Theme three: public versus private processes of care

Generally, a high level in trust of public health services was displayed by participants, as the following excerpts illustrate.

*"Oh my God, you know, I trust the surgeons with my life, I really do. Women out there that are wanting to have it done, go for it. Go for it, do you know what I mean? Do something for yourself like I did. You're not going to get a 21-year-old's body but that is a little bit towards it, you know? Go for it. Put your life in the doctor's hands because that's what they study for. That's why God's given them that gift, to help us." **Zofia***

*"If these surgeons couldn't do their job, they wouldn't be in a job ... I have total trust in their knowledge and their ability." **Kirsty***

Participants talked about different expectations in relation to 'knowing the surgeon' than if they were paying for the surgery, rather than having it in the public system.

*"I mean obviously going through public you're going to have the trainees as opposed to private whereas you meet the doctor that will be your doctor." **Robyn***

*"If I was paying for it of course then I'd probably be a bit like, 'Well, I've paid you all this money to do it and now you're not doing it, someone else is' but I kind of feel that being a public patient in a very busy public hospital, I was lucky to get what I've had done so I'm just grateful for that aspect of it really." **Trudy***



Some participants felt that there were more limited options for understanding expected outcomes in a public versus private system when using the internet or social media for research.

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*"I joined this Facebook group, because I want to see before and after because you don't know what it's going to look like. You just—you've got no expectations, so I would trawl through and find someone with a similar tummy to me and see their after photos and think, 'Wow, that's amazing, that's what I could have' type of thing."* **Rachel**

*"I won't get the chance, normally, like if you were going and having an abdominoplasty privately you would research your surgeons, find someone with a good reputation. You would want to see before and after pictures of their work, that kind of thing and, you know, get a feel for them, their reputation, what their work is like."* **Annette**

#### Theme four: results of surgery

Of those who had undergone surgery, two women were very unhappy with the results. The following is an excerpt from one of them (see also final column in **Table 2**).

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*"I was lying down...how [sic] that was sticking out, she said to me, 'Oh, we could take a little bit more off here' and I went, 'Okay, I would really like that' and she goes, 'But we'll wait for the six week check-up.' That's when I saw Dr [Name] and she says, 'I don't know if we can do any more, if there's any more funding from the government for that.' Interviewer: 'And how did that make you feel?' Zofia: 'Very upset because I think to myself, it's just not right. It's just not finished off properly.'" **Zofia***

Two women were uncertain if they were glad that they had undergone surgery (reporting that it would take them a while to get used to the new them), with the following quote illustrating this outcome.

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*"I still have the same hang-ups. I still don't like what I see in the mirror regardless and I still think, 'Oh my God, I don't look any different.' People say, 'Oh God, it's amazing', but I don't feel it."* **Jill**

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Most participants were happy they'd had the abdominoplasty, but some had had to spend time getting used to what the scar looked like. Generally, the scar, or 'finishing off', was a key point in determining how women felt about their surgery.

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*"I'm just happy to have had it done and under the public system, which cost me nothing, because I have tried hard to lose weight, so it was a reward for me to have it done and not to have to pay anything. Of course, we have been in medical benefits and taxes and all that, like everyone, so I thought I sort of deserved it too. Anyway, I was thrilled to have it done but I wasn't overly happy with the end result of the scar in the middle."* **Loretta**

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*"I've been back running and walking most days again so best thing I've ever done. Best thing ever."* **Trudy**

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For one participant, an improved mental state and completely alleviated back pain were the best parts about the surgery.

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*"Psychologically, a massive difference, and, despite the pain of surgery and the discomfort in my stomach muscles, not a scrap of back pain since the surgery, like, instantly gone."* **Rebecca**

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The participant interviews revealed that, although the surgeon was essentially focusing on the physical criteria for surgical treatment due to the mandate of the state policy, motivations of women for undergoing abdominoplasty were complex and multidimensional. They included psychological and social motivations as well as physical symptoms. On the theme of accessing surgical treatment, the interviews illustrated the frustrations and fears that patients may have around processes of selection for surgery and

not being familiar with their operating surgeon. The issue of 'knowing your surgeon' overlapped into the theme of public versus private treatment. Participants perceived one of the benefits of being treated privately as being able to access more information about anticipated surgical outcomes, which would assist them in developing realistic expectations. The feeling of gratitude for being able to access surgery in the public system and faith in the public system was found in several interviews, despite the acknowledged frustrations of waiting and risk of surgery cancellation. Several women showed an understanding of (and even preoccupation with) the criteria around surgery and the possibility of being denied access to abdominoplasty.

In terms of outcomes from surgery, results reported were more varied than might be expected in a group who all had clear physical indications for surgery. Improved back pain, quality of life and ability to exercise were all reported, but so were negative feelings about the aesthetic results of surgery.

## Discussion

This study of a group of women undergoing abdominoplasty in a public hospital setting has shown the heterogeneity of motivations for surgery, expectations and patient reported outcomes. Expectations of patients have been shown to be very varied, not just in terms of medical procedures and outcomes, but also in terms of process of care. In respect of psychosocial outcomes, again there was a broad range, from patients who were happy to those who were clearly distressed. The findings of this study are similar to those of Bragg and colleagues in the English National Health Service.<sup>6</sup> In their survey of abdominoplasty patients, they found variations in satisfaction, with most dissatisfaction being expressed around scars, residual abdominal overhang and 'dog-ears'. This highlights the importance of clarity in informed consent about scarring and expected outcomes.

From this study, the hurdles to accessing surgery provided delays for patients and seemingly affected quality of life, over and above the actual impairment due to the condition. It is difficult to quantify how much this factor may be compounding the distress and reduced mental wellbeing of these women. There is evidence to support that the waiting itself (for any type of elective surgery) can contribute to anxiety and depression.<sup>7,8</sup>

In regard to the value of abdominoplasty for improving mental health, the comments of participants like 'Trudy' seem to validate this. Other studies also support the proposition that abdominoplasty improves mental health and wellbeing.<sup>9</sup> A Finnish study of 64 women undergoing abdominoplasty found significant levels of preoperative psychopathology, and significant improvements in mental health following surgery.<sup>10</sup> This is concordant with reports from participants like 'Heather' who had experienced suicidality and depression in the past and found abdominoplasty 'psychologically effective'.

However, the effect of abdominoplasty on mental health is not always predictable. The literature indicates that the effect is different between patients with no formal psychopathology, those with common psychopathologies (such as depression) and different again in those with severe psychopathologies such as body dysmorphic disorder.<sup>11,12</sup>

It seems clear from the literature that it is important for plastic surgeons to understand the level of psychopathology in those seeking abdominoplasty at the preoperative assessment stage.<sup>13</sup> This is further supported by Pearson and colleagues' study on public sector abdominoplasty, which concluded that a psychiatrist could have a useful role for public patients with psychological distress.<sup>1</sup>

In terms of physical and quality of life benefits from surgery, several participants in our study confirmed this benefit, none as clearly as 'Rebecca' in her report of complete resolution of her back pain. Despite the lack of consensus in defining pathology, in terms of effectiveness of abdominoplasty for treating established symptomatic rectus diastasis, there is now good evidence. Measures such as the Oswestry disability index (ODI) and other patient reported outcomes measures (PROMs) have been used to demonstrate relief of back pain and improved quality of life in several patient cohorts.<sup>14-17</sup>

Several interviews highlighted the role of abdominoplasty in resolving skin infections and rashes. This is consistent with evidence in the literature demonstrating that the excess abdominal skin following massive weight loss and consequent rashes beneath the residual pannus is associated with health impairment<sup>18</sup> and that abdominoplasty is an effective treatment.<sup>19-21</sup>

It should be noted that since the enrolment of some of the patients to this study, increased policy restrictions on abdominoplasty would now exclude some of the women who participated.<sup>5</sup> Health funders worldwide are under pressure to curb spending, and as plastic surgery is often perceived as equating to aesthetic/cosmetic surgery, it is a target for restrictions. The basis for restrictions is not always centred on the wellbeing of patients or equity of access. This is articulated well in articles from the UK on the ‘postcode lottery’ of elective surgery.<sup>22</sup>

The limitations of this study are that the participants were not a homogenous group and only a few of the participants were interviewed both before and after surgery. Those interviewed only after surgery had to rely on the recollection of their motivation for surgery and how they experienced preoperative health care processes. In addition, women were not classified according to current restriction criteria, so it is not possible to know how many would meet criteria if they were assessed today. The strength of this study is that it is the first qualitative study on the experiences of women in an Australian public hospital setting undergoing abdominoplasty.

## Conclusion

Women undergoing abdominoplasty in the public sector are not a homogenous group, neither in their motivations for surgery nor in their reported outcomes. This qualitative study found evidence for improvement in physical symptoms and psychological wellbeing in women undergoing abdominoplasty, which supports existing quantitative studies, but also highlights a need for liaison psychiatry and clear information for public sector patients, especially relating to scars. Criteria-based assessment contributes an additional burden for these patients.

## Patient consent

Patients/guardians have given informed consent to the publication of data.

## Conflict of interest

Nicola Dean is the breast section editor for the *Australasian Journal of Plastic Surgery* and was removed from the editorial process due to this conflict of interest. There are no other conflicts of interest to disclose for any authors.

## Funding declaration

The authors received no financial support for the research, authorship, and/or publication of this article.



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