

Breastfeeding Counseling Practices Among Plastic Surgeons: Results From a National Survey

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Background: Breastfeeding has well-established benefits for maternal and infant health. Difficulty with breastfeeding is a possible complication after breast surgery and can have detrimental maternal psychological consequences. Although lactation outcomes after breast surgery have been reported, plastic surgeons' preoperative counseling practices regarding breastfeeding after surgery have not yet been studied.

Methods: From November 2021 to January 2022, a 25-question anonymous survey on breastfeeding counseling practices, personal breastfeeding experiences, demographics, surgical training, and length of practice was administered to 6000 members of the American Society of Plastic Surgeons.

Results: A total of 146 respondents were included, and 90.7% of respondents believe that breast surgery can affect breastfeeding. Although 96.6% of respondents routinely discuss possible postoperative challenges with breastfeeding, 39.3% differentiate between inclusive and exclusive breastfeeding, 22.2% discuss potential emotional consequences, and only 12.8% discuss the need for galactagogues or labor-intensive ancillary activities. Significantly more respondents who had been in practice for less than 15 years believed that breast surgery can affect breastfeeding and reported counseling on breastfeeding impairment risk before transgender top surgery, compared with those who had been out of training for more than 15 years (96% versus 84%, $P = 0.05$; 72% versus 54%, $P = 0.05$).

Conclusions: Most plastic surgeons believe breast surgery can affect lactation and counsel patients as such. However, the potential deleterious mental health consequences of challenged breastfeeding after breast surgery seem undercounseled. Our findings highlight a potential need for increased education and improved preoperative breastfeeding counseling protocols for plastic surgeons. (*Plast Reconstr Surg Glob Open* 2025;13:e6691; doi: [10.1097/GOX.0000000000006691](https://doi.org/10.1097/GOX.0000000000006691); Published online 14 April 2025.)

INTRODUCTION

Breastfeeding is known to have nutritional, gastrointestinal, immunologic, and neurological benefits for the infant. Breastfeeding is also associated with increased

maternal-infant bonding and decreased maternal breast and ovarian cancer risk.¹⁻³ The World Health Organization recommends that infants breastfeed up to 6 months of age followed by continued breastfeeding and complementary foods up to around 2 years of age to achieve optimal infant growth, development, and health.³⁻⁶

Difficulty with breastfeeding can have a deleterious impact on maternal psychological outcomes. Studies suggest that challenging breastfeeding experiences are associated with increased anxiety and may play a role in postpartum depression.⁷⁻¹⁰ The added psychological factors paired with breastfeeding impairment may compound, leading to more difficulty in developing a mother-child bond.¹¹

Breast surgery can impact lactation as both the supply and delivery of breast milk rely on at least some glandular tissue remaining connected to intact ducts and the nipple.^{6,12} Although attempts at new techniques, such as the "owl-shaped" inferior wedge resection in breast reduction

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surgery, have been developed that provide a greater likelihood of breastfeeding success, any disruption of breast tissue can still theoretically affect breastfeeding.^{13,14} Indeed, a recent meta-analysis reported impaired lactation in women after augmentation alone.¹⁵ Although there have been numerous studies on lactation outcomes after breast surgery,^{13,16–19} plastic surgeon preoperative counseling practices regarding lactation after surgery have not yet been studied. We surveyed members of the American Society of Plastic Surgeons (ASPS) to elucidate breastfeeding counseling practices among plastic surgeons in patients consulting about breast surgery.

METHODS

Data Collection

From November 2021 to January 2022, an anonymous survey was administered to all members of the ASPS by a listserv via the American Council of Academic Plastic Surgeons. The survey included 25 single and multiple-choice response questions about personal breastfeeding experiences and discussions surrounding breastfeeding with patients of childbearing age. Questions regarding respondent demographics, surgical training, and length of practice were also included. A nonresponse bias was obtained from ASPS to compare responder demographics to nonresponder demographics. Participants' practice was defined as academic practice, hybrid academic, employed, solo, solo practice—shared facility, small plastic surgery group (2–5 surgeons), large plastic surgery group (6 or more surgeons), medium multispecialty group practice (6–20 physicians), or large multispecialty group practice (more than 20 physicians).

Statistical Analysis

Frequencies and proportions were used to present categorical characteristics. Differences between continuous variables were analyzed using independent *t* tests or analysis of variance. The Fisher exact test was utilized to compare differences between categorical variables. Responses were compared among provider gender, length of training, percentage of breast surgery in provider's practice, and personal or spouse history of breastfeeding. This study protocol was reviewed and approved by the institutional review board (IRB 202200205) and found to be exempt.

RESULTS

One hundred forty-six respondents were included in this study. The demographic data of the invited ASPS survey population and the survey respondents are comparable, although a higher percentage of respondents were female compared with the ASPS population (47% versus 25%). Most respondents were from solo practice (31%), followed by academics (21%), and were between 35 and 44 years of age (34%) (Table 1). Most respondents were fellowship-trained in aesthetics (44.5%), had been in practice for 15–19 years (70.1%), and performed 25%–50% breast surgery in their practice (33.8%) (Table 2).

Takeaways

Question: What are plastic surgeons' preoperative lactation counseling practices?

Findings: In this qualitative study of 146 members of the American Society of Plastic Surgeons, lactation counseling practices seem undercounseled.

Meaning: Increased residency education or standardized preoperative counseling for lactation risk before breast surgery may be warranted.

Most respondents (90.7%) believe that breast surgery in general can affect future breastfeeding; 96.6% of respondents routinely discuss possible postoperative challenges of breastfeeding with patients receiving breast modification procedures during the preoperative consultation. Eighty-one percent discuss possible mechanisms for how breast surgery could affect lactation. Furthermore, 39.3% differentiate between inclusive (requiring supplementation of formula) and exclusive breastfeeding; 22.2% discuss emotional issues that arise with the inability to breastfeed; and 12.8% discuss the need for galactagogues or labor-intensive ancillary activities such as power pumping or triple feeding (Fig. 1).

Figure 2 demonstrates ASPS member respondent ratings on the perceived risk of specific breast procedures on breastfeeding outcomes, which is numerically described in Table 3. Respondents rated the impairment of specific breast procedures on an 11-point scale from 0, no impairment, to 10, significant impairment. Mastectomy was rated as the most significant impairment, with 100% (*N* = 117) of respondents rating risk at 9–10 out of 10. Mastectomy (9.97 ± 0.18) was followed by oncoplastic breast reduction (6.38 ± 2.11) and breast reduction (5.76 ± 1.85) as the 3 breast procedures with the highest rated risk of breastfeeding impairment. Breast augmentation risk ratings varied by approach, with respondents rating more risk with a periareolar approach compared with nonperiareolar (4.24 ± 2.5 versus 2.46 ± 1.41). Respondents rated higher risk with mastopexy involving glandular rearrangement (4.99 ± 2.12) and resection (5.09 ± 2.00) compared with mastopexy with skin resection alone (1.5 ± 1.61).

Table 4 compares ASPS members' perceived breastfeeding impairment risk by sex, length in practice, and percentage of breast surgery performed in practice. Female respondents rated significantly higher risk with breast augmentation mastopexy using a dual plane/submuscular implant (*P* = 0.015), mastopexy using skin resection only (*P* = 0.006), and mastopexy involving glandular rearrangement (*P* = 0.043) compared with male respondents. Compared with respondents who had been in practice for 15 years or more, those who had been in practice for less than 15 years rated a higher breastfeeding complication risk with breast augmentation via a periareolar (*P* = 0.004) or nonperiareolar approach (*P* = 0.001), breast augmentation using an implant placed in the dual/submuscular plane (*P* = 0.032), breast augmentation mastopexy using a subglandular implant (*P* = 0.023), and breast augmentation mastopexy using a dual plane/

Table 1. Comparison Between Invited ASPS Survey Population and Survey Respondents

Demographic Variables	Invited Survey Population, N	Percentage, %	Survey Respondents, N	Percentage, %
Sex	2333	—	115	—
Men	1757	75	61	53
Women	576	25	54	47
ASPS member years	1897	—	117	—
<5	370	20	31	26
5–9	408	22	16	14
10–14	343	18	20	17
15–19	238	13	15	13
20–24	178	9	10	9
25 or more	360	19	25	21
Practice types	2121	—	117	—
Academic	449	21	24	21
Hybrid academic	38	2	3	3
Employed	187	9	17	15
Solo	638	30	36	31
Solo practice—shared facility	106	5	2	2
Large multispecialty group	192	9	8	7
Large plastic surgery group	83	4	4	3
Small plastic surgery group	358	17	2	2
Medium multispecialty group	40	2	0	0
Retired	4	0	1	1
Practice demographics	2120	—	131	—
50% recon and 50% cosmetic	370	17	27	21
25% recon and 75% cosmetic	342	16	29	22
75% recon and 25% cosmetic	652	31	39	30
100% cosmetic	302	14	17	13
100% reconstructive	454	21	19	15
Age	2323	—	146	—
Under 35	61	3	7	5
35–44	803	35	49	34
45–54	731	31	41	28
55–64	430	19	25	17
65 and over	298	13	24	16

Employed, employed physician; hybrid academic, academic practice that is salaried with private practice; large multispecialty group, a multispecialty group with more than 20 physicians; large plastic surgery group, a plastic surgery group with more than 6 plastic surgeons; medium multispecialty group, a group with 6–20 physicians; recon, reconstructive; small plastic surgery group, a group with 2–5 plastic surgeons.

submuscular implant ($P = 0.007$). Those whose practice constituted more than 50% breast surgery reported an increased risk of breastfeeding impairment with breast augmentation mastopexy using a subglandular implant ($P = 0.020$), breast augmentation mastopexy using a dual plane/submuscular implant ($P = 0.005$), and breast reduction ($P = 0.015$), compared with those with a less than 50% breast surgery practice. There was no difference between personal or spouse history of breastfeeding and responses.

Nearly all respondents reported routinely counseling regarding the risk of impaired lactation before breast reduction (99.15%), followed by mastopexy with glandular resection (83.9%), and mastopexy with glandular rearrangement (82.2%). A total of 80.51% reported routinely discussing risk before mastectomy, 77.97% reported discussing risk with oncoplastic breast reduction after lumpectomy, and 61.86% reported discussing risk before lumpectomy (Fig. 3). When performing immediate reconstruction after breast surgery, 62.1% of respondents believe plastic surgeons are responsible for counseling about postoperative lactation in the case of lumpectomy

and 33.6% believe that the plastic surgeon is responsible in the case of mastectomy (Fig. 4).

There was no difference in preoperative breastfeeding counseling responses between male and female respondents, percentage of breast surgery performed in practice, or personal or spouse history of breastfeeding. When comparing the length of time in practice (<15 versus ≥15 y), significantly more respondents who had been in practice for less than 15 years believed that breast surgery in general can affect breastfeeding compared with those who had been out of training for more than 15 years (96% versus 84%, $P = 0.05$). Significantly more respondents who had been in practice for less than 15 years reported counseling on breastfeeding postoperative complications in transgender patients undergoing female-to-male top surgery compared with respondents who had been out of training for 15 years or more (71% versus 54%, $P = 0.05$) (Table 5).

DISCUSSION

Breastfeeding risk counseling before breast surgery is crucial due to the significant mental and physical health

Table 2. ASPS Member Survey Respondent Demographics

Demographic Variables	Response Number, N	Percentage, %
Residency training	142	—
Traditional	64	45.1
Integrated	78	54.9
Fellowship training	146	—
No fellowship	9	6.2
Aesthetic	65	44.5
Burn	17	11.6
Craniofacial	5	3.4
Hand	10	6.8
Microsurgery	20	13.7
Other	20	13.7
Practice types	117	—
Solo practice	38	32.5
Group practice	32	27.4
Academic practice	27	23.1
Military	2	1.7
Employed physician	17	14.5
% Practice total breast surgery	145	—
<25	21	14.5
25–50	53	36.6
51–75	49	33.8
>75	22	15.2

Academic practice, academic or hybrid academic practice; group practice, multispecialty or plastic surgery group practice; solo practice, solo practice or solo practice—shared facility.

benefits of breastfeeding for both mother and infant. Although most plastic surgeons (96.6%) provide counseling on breastfeeding risks during preoperative visits, the results of this study highlight that certain areas may be underrecognized and undercounseled during the preoperative visit.

Surgical disruption of glandular tissue and ducts can impair lactation, with greater disruption leading to higher risks.¹³ Our results reflect this principle, with mastectomy ranked as the greatest risk for lactation impairment, followed by other procedures disrupting glandular and ductal tissue to lesser degrees (ie, oncoplastic and routine breast reductions). Mastopexy with glandular rearrangement or resection was perceived as riskier than mastopexy with skin resection alone. Interestingly, female respondents rated mastopexy (with and without glandular rearrangement) as having a higher perceived risk of breastfeeding impairment than male respondents, perhaps reflecting differences in personal experience. Although all respondents agreed that mastectomy impaired lactation most significantly, only 80.5% of respondents counseled about the risk preoperatively. Similarly, although oncoplastic breast reduction was rated as having the second-highest lactation impairment risk, only 77.97% of respondents reported counseling their patients about it preoperatively. This is likely due to most plastic surgeons believing that the oncological intervention (ie, the radiation after oncoplastic surgery) versus the reconstruction is primarily to blame for impaired breastfeeding, leaving counseling to the oncological surgeon. Indeed, 62.1% and 37.9% of respondents, respectively, believe plastic surgeons to be responsible for counseling about postoperative

lactation impairment in the case of lumpectomy and 33.6% in the case of mastectomy. Unfortunately, studies suggest inadequate counseling by the oncological surgeons regarding the surgical impact on lactation.²⁰ Azim et al²⁰ demonstrated that patients with a history of breast cancer reported receiving insufficient information from their surgeon about breastfeeding after cancer treatment and some were even counseled against attempting breastfeeding. Given this gap and the known mental health impacts of breastfeeding challenges, plastic surgeons should assume responsibility for counseling patients on surgical implications for future lactation, even when the oncological component of the procedure is a significant factor.

Conversely, nearly all plastic surgeons surveyed counsel on impaired breastfeeding risk after breast reduction. Surgeons whose practices constitute more than 50% of breast surgery rated the numerical risk for breastfeeding impairment significantly higher than those with less experience, likely due to increased familiarity with postoperative outcomes. These surgeons may also be more up-to-date on literature highlighting the variabilities of breastfeeding outcomes after reduction mammoplasty.^{20–24} Recent publications have also questioned previous conclusions that postoperative breastfeeding is not impacted by reduction mammoplasty surgery.^{13,25} Instead, breastfeeding capabilities are likely on a continuum, with a more significant impact associated with greater resection of subareolar parenchyma.¹³ Although recent studies report a 65%–73% lactational success rate after reduction mammoplasty,^{26–28} few define success comprehensively, considering exclusivity and duration. For example, Jørgensen et al² surveyed women who underwent superior medial pedicle reductions before or after childbirth. Indeed, only 5% of postsurgical women were able to exclusively breastfeed for 6 months and only 50% were able to breastfeed at all compared with 90% before surgery. This discrepancy among studies may be due to inadequate assessment methods, and most studies are, therefore, likely overestimating breastfeeding success after breast reductions.²⁴ This ambiguity in how successful lactation is commonly defined is important for plastic surgeons to be aware of when counseling patients.

Among our cohort, only 39.3% of respondents differentiated between inclusive (ie, requiring supplementation of formula) and exclusive breastfeeding. Although most women retain some lactational ability after breast surgery, milk supply is commonly inadequate and requires formula supplementation.²⁹ Differentiating between inclusive and exclusive breastfeeding is important, as exclusive breastfeeding has increased health benefits for the infant.^{30–32} According to the World Health Organization, although some breastmilk is better than none, to achieve optimal development, growth, and health, an infant should be exclusively breastfed.¹⁷ Additionally, breastfeeding has a myriad of psychological and emotional benefits.³³ Compared with formula feeders, breastfeeding mothers report improved mood, reduced risk of postpartum depression/anxiety, and reduced overall depression scores.^{34,35} Exclusive breastfeeding may have a protective effect against postpartum

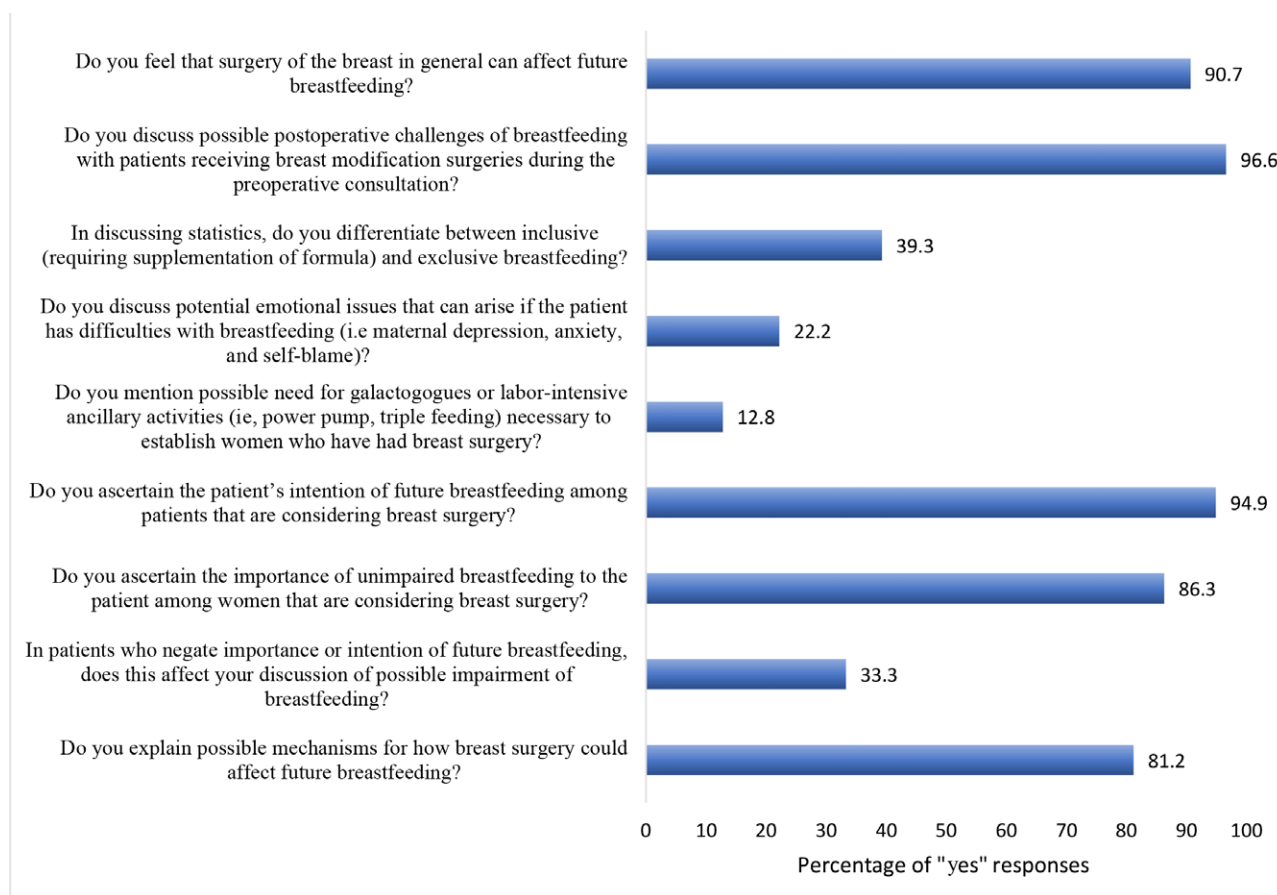


Fig. 1. Breastfeeding counseling practices among ASPS members before breast surgery.

anxiety, further underscoring the importance of discussing these distinctions with patients.^{34,35}

Yet, only 22.2% of surveyed plastic surgeons discuss the possible emotional consequences of an inability to breastfeed. Similarly, discussing the need for galactagogues or labor-intensive ancillary activities such as power pumping (ie, a method that mimics cluster feeding by pumping milk in back-to-back sessions) also seems undercounseled in our survey population, with only 12.8% discussing these topics during preoperative counseling. Given the significant pressure on women to exclusively breastfeed,³⁶ when faced with inadequate milk supply, supplementation with herbal and/or prescription galactagogues and employing techniques such as triple feeding are common.³⁷ Unfortunately, prescription galactagogues, such as domperidone or metoclopramide, have side effects including headaches, dry mouth, or gastrointestinal disturbances,³⁸ and even tardive dyskinesia,^{39,40} whereas most herbal supplements have no Food and Drug Administration oversight. Furthermore, supply boosting practices such as power pumping are associated with mastitis, trauma nipple damage,⁴¹ and poor nutritional value of expressed milk for infants.⁴² Furthermore, these labor-intensive practices are physically and emotionally burdensome on mothers and are disruptive to mother-infant bonding.

Surprisingly, perceived breastfeeding impairment risk after augmentation mammoplasty was low among surveyed

plastic surgeons (1.46 to 4.25, out of 10). Consequently, only 64%–75% of respondents reported counseling patients about breastfeeding risks before breast augmentation, with the highest counseling rates for the periareolar approach (75%). This approach directly disrupts ductal connections to the nipple and afferent nerves essential for the supply-demand feedback loop, making it the most associated with lactational insufficiency.⁴³

Although augmentation mammoplasty performed outside of the periareolar plane may leave most glandular and ductal tissue intact, pressure injury from the implant can cause lactiferous duct blockage and pressure atrophy.^{29,44} Furthermore, known implant-related complications, such as capsular contracture, infection, hematoma, or pain, can all impair lactation.¹⁷ Additionally, patients with implants may have difficulty with latching due to the mechanics of a taut nipple–areolar complex. From a psychological standpoint, women who undergo breast augmentation may also be more likely to give up breastfeeding when faced with difficulties, and breast augmentation has been associated with a significant reduction in the likelihood of exclusive breastfeeding.^{17,45,46} As with other breast procedures, surgeons with more breast surgery experience rated higher lactation risk for augmentation, suggesting greater awareness in this cohort.

Interestingly, junior plastic surgeons (ie, those in practice <15 y) reported higher rates of counseling on



Fig. 2. ASPS members' reported ratings of breast surgery risks on future breastfeeding impairment.

breastfeeding complications in transgender patients undergoing female-to-male top surgery. This may reflect increased exposure to transgender surgery among recent trainees, aligning with findings from other specialties that younger physicians are more likely to initiate hormone therapy for transgender individuals.⁴⁷ Despite this, a significant gap remains, with only 64% of respondents counseling patients about lactational impairment before female-to-male top surgery. Although most surgeons may assume that lack of lactation after

mastectomy is self-evident, some transmasculine individuals may still pursue pregnancy and chest-feeding, often requiring assistance from lactation professionals.⁴⁸⁻⁵⁰ A nuanced understanding of these challenges is important for anyone offering breast surgery to diverse patient populations.

Based on the results of this study, several recommendations may be implemented into plastic surgeons' practice regarding preoperative counseling and patient education about breastfeeding impairment risks. First, it is important

Table 3. ASPS Member Survey Respondent Ratings of Breast Surgery Risk on Future Breastfeeding

Breast Surgery	Response Number, N	Average* \pm SD
Breast augmentation via a periareolar approach	117	4.25 \pm 2.56
Breast augmentation via a nonperiareolar approach	115	1.46 \pm 1.44
Breast augmentation using a subglandular implant	116	2.16 \pm 1.95
Breast augmentation using an implant placed in the dual/submuscular plane	117	1.48 \pm 1.39
Breast augmentation mastopexy using a subglandular implant	115	4.27 \pm 2.29
Breast augmentation mastopexy using a dual plane/submuscular implant	117	3.78 \pm 2.20
Mastopexy using skin resection only	117	1.5 \pm 1.61
Mastopexy involving glandular rearrangement	116	4.99 \pm 2.12
Mastopexy involving any glandular resection	118	5.09 \pm 2.00
Breast reduction	118	5.76 \pm 1.85
Mastectomy	116	9.97 \pm 0.18
Lumpectomy	117	4.79 \pm 1.99
Oncoplastic breast reconstruction after lumpectomy	118	6.38 \pm 2.11

*Average respondent rating on a scale from 0 to 10, from no impairment to strong impairment.

Table 4. Breast Surgery Breastfeeding Impairment Rating by Sex, Years in Practice, and Percentage Breast Surgery (Cosmetic or Reconstructive) in Practice

	Gender Identity			Years in Practice			Percentage of Breast Surgery in Practice		
	Male Average \pm SD	Female Average \pm SD	P	<15 Y Average \pm SD	≥ 15 Y Average \pm SD	P	<50% Average \pm SD	$\geq 50\%$ Average \pm SD	P
Breast augmentation via a periareolar approach*	4.05 \pm 2.39	4.58 \pm 2.70	0.258	4.85 \pm 2.53	3.50 \pm 2.35	0.004†	3.97 \pm 2.60	4.55 \pm 2.46	0.210
Breast augmentation via a nonperiareolar approach*	1.24 \pm 1.14	1.74 \pm 1.7	0.078	1.83 \pm 1.56	1.0 \pm 1.10	0.001†	1.27 \pm 1.27	1.67 \pm 1.59	0.132
Breast augmentation using a subglandular implant*	2.05 \pm 1.95	2.27 \pm 1.91	0.551	2.43 \pm 1.78	1.76 \pm 2.06	0.063	2.21 \pm 2.08	2.09 \pm 1.82	0.738
Breast augmentation using an implant placed in the dual/submuscular plane*	1.36 \pm 1.30	1.65 \pm 1.51	0.270	1.73 \pm 1.47	1.16 \pm 1.23	0.032†	1.47 \pm 1.48	1.49 \pm 1.30	0.929
Breast augmentation mastopexy using a subglandular implant*	3.83 \pm 2.26	4.88 \pm 2.21	0.276	4.71 \pm 2.23	3.73 \pm 2.23	0.023†	3.80 \pm 2.19	4.80 \pm 2.32	0.020†
Breast augmentation mastopexy using a dual plane/submuscular implant*	3.30 \pm 2.04	4.42 \pm 2.25	0.015†	4.28 \pm 2.29	3.18 \pm 1.89	0.007†	3.24 \pm 2.01	4.38 \pm 2.27	0.005†
Mastopexy using skin resection only*	1.25 \pm 1.40	1.87 \pm 1.81	0.006†	1.75 \pm 1.63	1.22 \pm 1.56	0.078	1.30 \pm 1.44	1.71 \pm 1.77	0.161
Mastopexy involving glandular rearrangement*	4.72 \pm 1.95	5.40 \pm 2.30	0.043†	5.30 \pm 2.25	4.60 \pm 1.91	0.084	4.71 \pm 1.89	5.31 \pm 2.33	0.126
Mastopexy involving any glandular resection*	4.98 \pm 2.05	5.26 \pm 1.99	0.461	5.35 \pm 2.02	4.76 \pm 1.95	0.118	4.82 \pm 1.95	5.39 \pm 2.04	0.123
Breast reduction*	5.67 \pm 1.85	5.91 \pm 1.90	0.509	5.80 \pm 1.91	5.70 \pm 1.82	0.769	5.37 \pm 1.83	6.20 \pm 1.79	0.015†
Mastectomy*	9.95 \pm 0.22	9.98 \pm 0.14	0.386	9.97 \pm 0.173	9.96 \pm 0.202	0.747	9.95 \pm 0.22	9.98 \pm 0.14	0.365
Lumpectomy*	4.60 \pm 1.91	5.11 \pm 2.10	0.177	4.94 \pm 2.16	4.65 \pm 1.77	0.2451	4.61 \pm 1.89	5.00 \pm 2.10	0.288
Oncoplastic breast reconstruction after lumpectomy*	6.21 \pm 2.35	6.70 \pm 1.79	0.223	6.38 \pm 2.04	6.42 \pm 2.24	0.918	6.10 \pm 2.02	6.70 \pm 2.17	0.123

*Rate on a scale of 0–10, from no breastfeeding impairment to strong breastfeeding impairment.

†Significance, $P < 0.05$.

to ensure comprehensive counseling on the risks of breastfeeding impairment before all types of breast procedures, especially those that significantly disrupt glandular and ductal tissue, such as breast reduction and top surgery. For reduction mammoplasty, patients are at 3.5 times increased odds of being unable to breastfeed compared with patients without breast surgery.⁵¹ For a transgender patient with a free nipple graft procedure, they should be

counseled of almost no chance of breastfeeding, whereas a breast augmentation patient has a much higher likelihood of breastfeeding. For oncological procedures where plastic surgery involvement for reconstruction is planned, relying on the breast surgical oncologist for counseling may be insufficient, and counseling should include the negative effects of mastectomy and oncoplastic breast reduction on future lactation, even in the reconstructed patient. Plastic

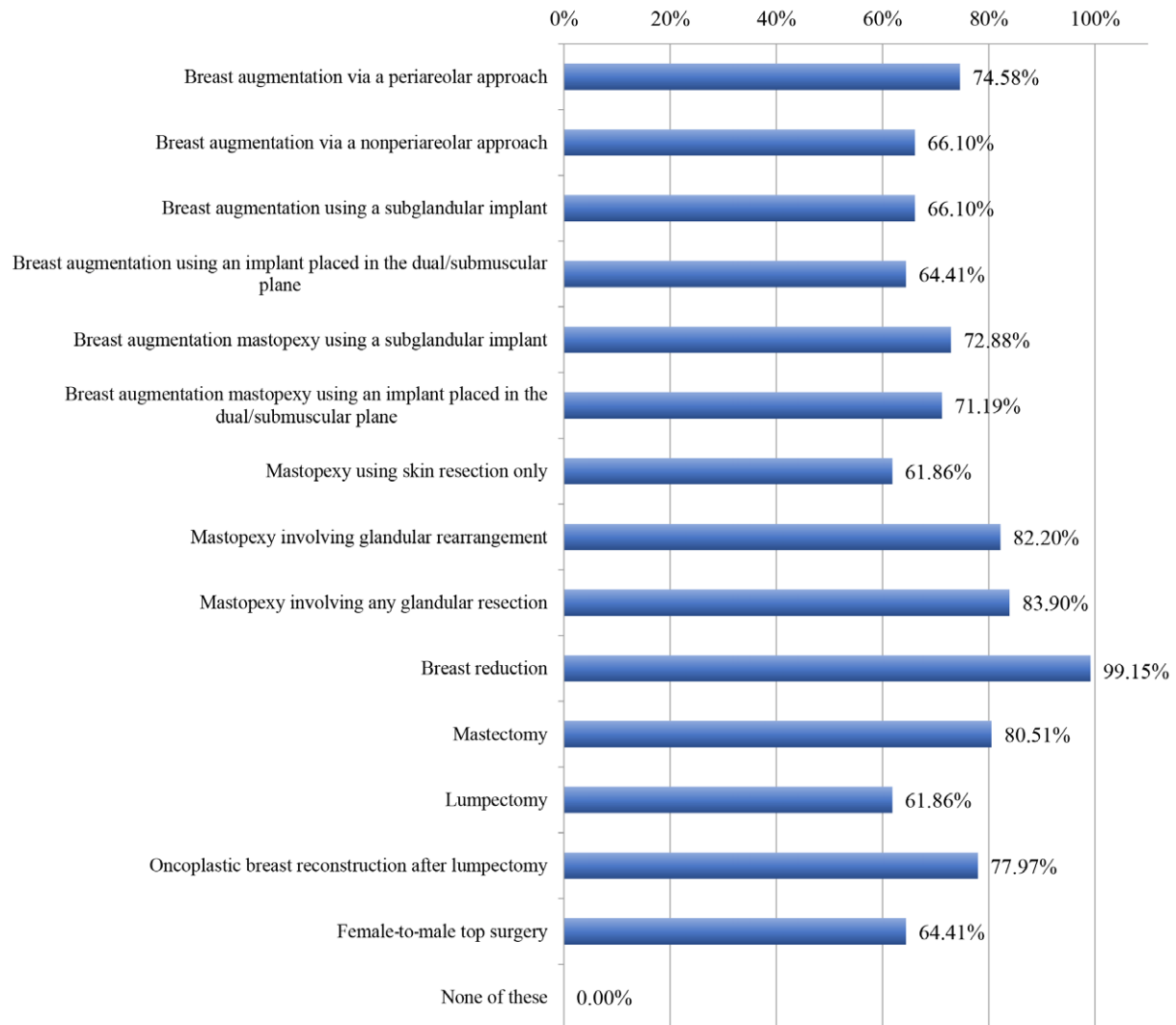


Fig. 3. Percentage of ASPS members reporting breastfeeding counseling practices before specific breast procedures.

surgeons hold a responsibility to discuss the implications of surgical techniques on future lactation capabilities. Additionally, specialized counseling for patients undergoing procedures associated with gender-affirming procedures, particularly female-to-male top surgery, should be considered. Plastic surgeons caring for transgender patients should be aware that some transmasculine individuals may desire to chest-feed and thus require targeted counseling about the potential for lactation and available support systems. Furthermore, plastic surgeons should clearly differentiate between exclusive and inclusive breastfeeding and educate patients about the varying definitions and expectations of breastfeeding success, including the implications of needing to supplement with formula. Also, plastic surgeons should include discussions about the psychological impact of potential breastfeeding challenges, particularly for mothers who may feel societal pressure to exclusively breastfeed. This could encompass discussions on mental health benefits associated with breastfeeding

and the emotional implications of insufficient milk supply. We also encourage plastic surgeons to discuss options for galactagogues and the labor-intensive methods of increasing milk supply as well as the potential side effects and challenges associated with these practices.

There are several limitations of our study. First, self-reported practices are susceptible to reporting bias, though anonymity mitigates this concern. Second, the survey's response rate was low (6.3%), though the demographic distribution is comparable to the ASPS member population, except for a higher proportion of female respondents. Perhaps, more women may be interested in breastfeeding or more willing to talk and counsel about it. Additionally, respondents may vary in their postoperative assessment methods for breastfeeding, with some basing responses on objective data and others on collective experience. For the rating of impairment of specific breast procedures in Figure 2, participants rated the severity of impairment on an 11-point scale (from 0 to

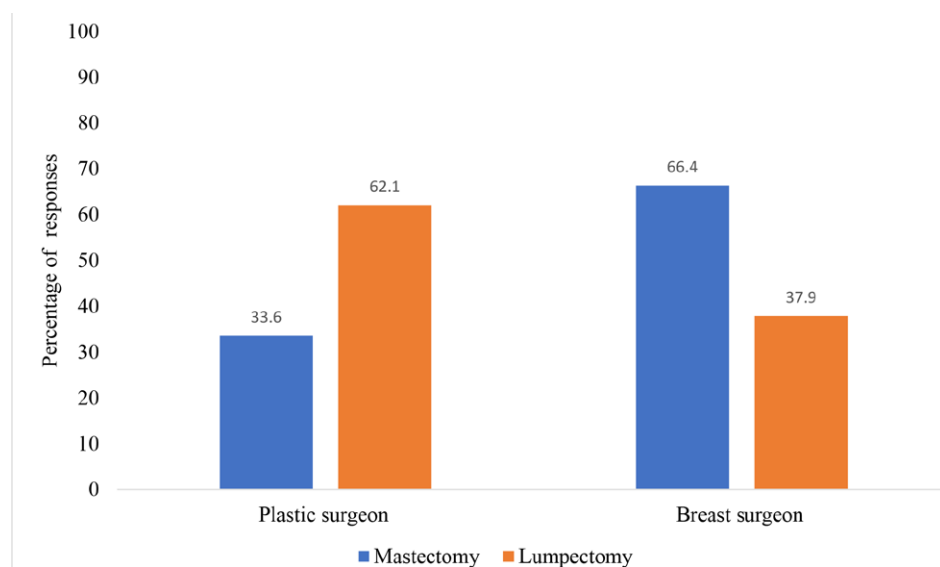


Fig. 4. ASPS member opinions on which specialists are primarily responsible for breastfeeding counseling when doing an immediate reconstruction after breast surgery.

Table 5. ASPS Member Reported Beliefs and Preoperative Counseling by Length of Time in Practice

Outcome	<15 Y in Practice	≥15 Y in Practice	P
Believe breast surgery, in general, can affect future breastfeeding	64 (96)	41 (84)	0.05*
Counsel on breastfeeding postoperative complications in transgender patients undergoing female-to-male top surgery	48 (72)	27 (54)	0.05*

Data presented as N (%).

*Statistical significance, $P \leq 0.05$.

10), instead of the traditional 10-point scale, skewing the scores downward. Future studies could explore patient attitudes, fears, and regrets related to breastfeeding challenges after surgery to identify themes for improved counseling.

CONCLUSIONS

Any breast surgery has the potential to affect postoperative lactation, which can have significant mental and physical health impacts on mother and infant. Although most plastic surgeons routinely discuss possible postoperative challenges in breastfeeding with patients consulting about breast modification procedures, few differentiate between inclusive and exclusive breastfeeding, discuss the need for galactagogues or labor-intensive ancillary activities, or discuss emotional issues that arise with challenged breastfeeding. Plastic surgeons, especially those whose practice constitutes less than 50% breast surgery, may be underestimating the breastfeeding impairment risks after various surgical interventions. Most plastic surgeons rely on the oncological surgeon to counsel on breastfeeding impairment risk in reconstructive cases, and lactational impairment after top surgery remains undercounseled.

Overall, although most plastic surgeons demonstrate understanding of potential risks to lactation after any breast surgery, widespread and particularly more nuanced counseling is still lacking, highlighting the potential need for increased training and awareness in both formal

training programs and postgraduate continued education forums.

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DISCLOSURE

The authors have no financial interest to declare in relation to the content of this article.

ETHICAL APPROVAL

The institutional review board approved this investigation at the University of Florida.

DECLARATION OF HELSINKI

All methodology conforms to the standards set in the Declaration of Helsinki.

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