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Shared Decision-making in Breast Cancer Reconstructive Surgery: Experience in a Leading Hospital

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Background: The paradigm of healthcare has evolved toward patient-centered approaches, where shared decision-making (SDM) plays a pivotal role. This study aimed to explore the implementation of SDM during breast cancer reconstruction consultations and assess its impact on patient satisfaction and the decision-making process as a whole.
Methods: A total of 102 female patients undergoing breast reconstruction were included in a multidisciplinary breast pathology unit. A streamlined SDM model involving choice introduction, option description, and preference exploration was implemented. A validated Spanish version of the nine-item Shared Decision Making Questionnaire was used alongside a complementary questionnaire. Data analysis was carried out using electronic data capture software.
Results: The nine-item Shared Decision Making Questionnaire results indicate strong agreement in presenting various options and explaining their advantages and disadvantages. Patients were less confident about their participation in decision-making. The Complementary Shared Decision Making Questionnaire highlighted high satisfaction with interview times and language clarity but areas for improvement in consultation space and therapeutic choice participation.
Conclusions: Integrating SDM into breast reconstruction consultations empowers patients in the decision-making process and enhances satisfaction. Decision aids prove effective in this context, facilitating patients' comprehension and reducing decisional conflict. There are areas for improvement within the SDM strategy, and they are detectable through scales. Although challenges in information transmission and patient involvement persist, adopting an SDM model has potential benefits that warrant further investigation. *(Plast Reconstr Surg Glob Open 2024; 12:e5846; doi: 10.1097/GOX.0000000000005846; Published online 23 May 2024.)*

INTRODUCTION

In a world where patients are exhibiting increasing levels of independence, the paternalistic approach in the physician–patient relationship is becoming antiquated. Furthermore, given the expanding and increasingly accessible pool of information, medical practitioners should see themselves as guides in the decision-making process, making use of the most optimal tools available.

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Shared decision-making (SDM) has been defined as "an approach where clinicians and patients share the best available evidence when faced with the task of making decisions, and where patients are supported to consider options, to achieve informed preferences."[1,2]

When considering undergoing breast reconstruction, patients are confronted with numerous potential choices. Among other factors, they will encounter terms that are new to them, such as immediate or delayed reconstruction; reconstruction using alloplastic materials or autologous tissue; discussions regarding flap reconstruction; the possibility of receiving radiotherapy and its associated consequences; and many others. Given the absence of level A evidence pertaining to the optimal option, it is paramount to actively involve the patient in the ultimate decision-making process.

Although the SDM concept may seem subjective and challenging to implement, there exists a streamlined model made up of three straightforward and well-established steps: (a) introducing choice, (b) describing

Disclosure statements are at the end of this article, following the correspondence information.

options, (c) helping patients explore preferences and make decisions.[2]

We use this streamlined model in the breast pathology unit of our clinic, where our patients receive attention jointly from a gynecologist, a plastic surgeon, and a nurse. Additionally, we use tools to facilitate this process.

Decision aids (DAs) are educational tools that aim to provide information to facilitate better decision-making. DAs for surgical treatment of breast cancer have improved patient knowledge, satisfaction with information, clarity of personal values, and readiness to make surgical decisions, and they also reduced decisional conflict and regret.[3]

After conducting the SDM process, scales can be used, which, when complemented by the patient, provide insights into the execution of the process. The nine-item Shared Decision Making Questionnaire (SDM-Q-9) (Fig. 1) is a reliable, concise, and well-accepted instrument.[4] In our clinic, we use a version of the validated Spanish translation.[5]

The purpose of this article is to present our experience with more than 100 patients, showcase our DA tool, analyze the results obtained as measured by the SDM-Q-9 and our modified questionnaire, and compare our practice with the available evidence.

Takeaways

Question: How can shared decision-making be incorporated into breast pathology units to enhance the process and outcomes of breast reconstruction and the involvement of patients in decision-making? How can we assess the correct implementation of this methodology?

Findings: Assessing the proper implementation of a decision-making model can be challenging and subjective, but there are tools that allow objective assessment of its correct application. Furthermore, their use in consultations helps improve the information process regarding breast reconstruction.

Meaning: The shared decision-making model is a useful framework that enables the incorporation of both scientific evidence and patient preferences into our consultations within multidisciplinary breast pathology units.

METHODS

We implemented the SDM approach in our breast pathology unit clinic over a period of two and a half years (March 2021 to October 2023). During the study period, a gynecologist, a plastic surgeon, and a nurse jointly consulted with 102 consecutive patients

The aforementioned steps were carried out in a manner such that, after informing the patient of her diagnosis and various therapeutic options, she becomes aware of her integral role in the decision-making process. At this juncture, the different choices available are spelled out, and assistance is provided to the patient in determining the most suitable option considering her circumstances and preferences. We use our own DAs as an educational tool. This consists of a user-friendly PowerPoint presentation that is explanatory and image-based, depicting the various reconstructive options. These DAs have been collaboratively developed and endorsed by the entire plastic surgery and gynecology team.

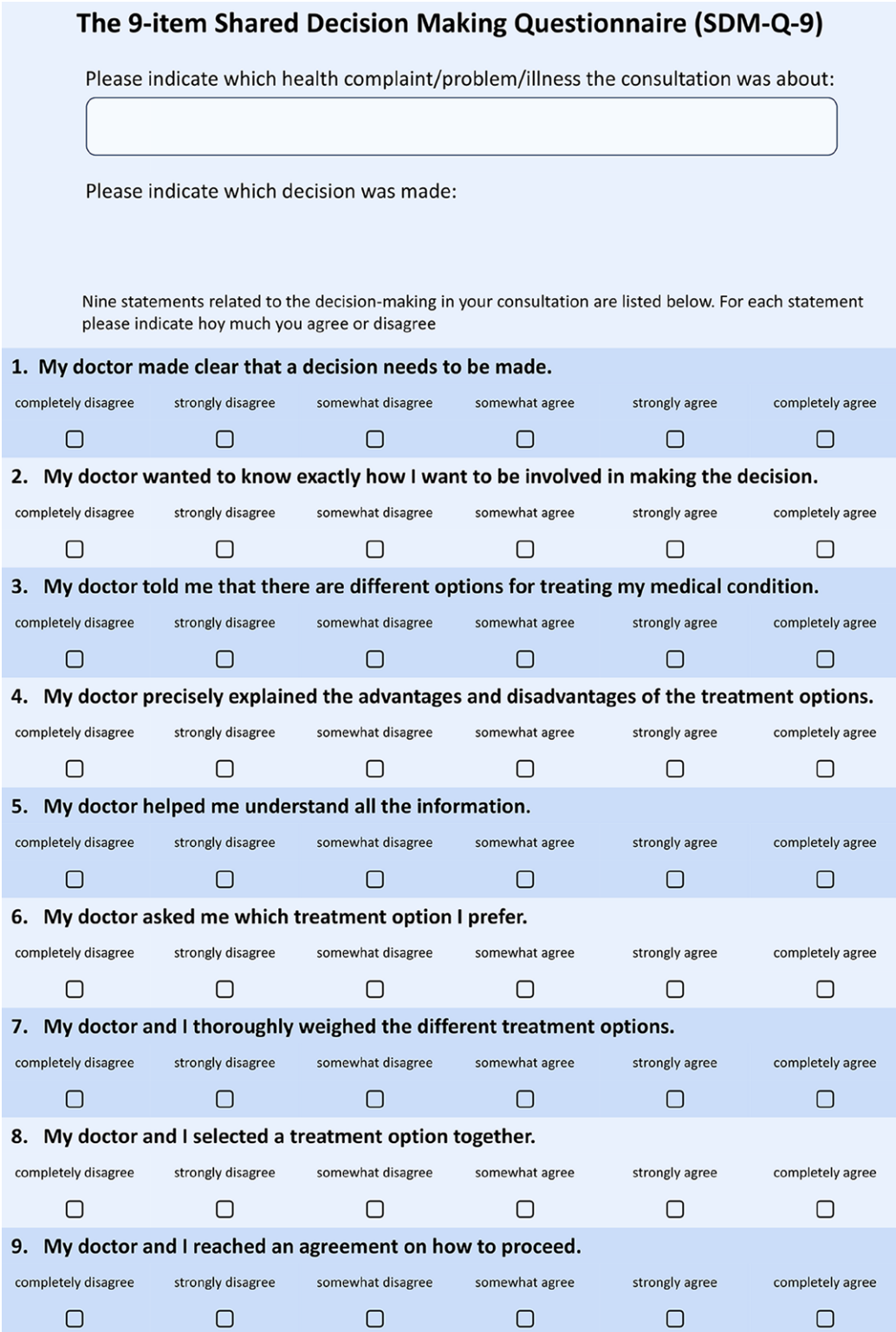
Among other features, our DAs showcase the diverse autologous tissue reconstructive options and alternatives involving alloplastic materials; incorporate links and QR codes to illustrative videos; and provide information regarding postoperative management, including a map indicating nearby stores where compression garments and suitable bras can be procured. Patients have the option to take this printed material with them if they wish. Other features of our SDM clinic include the following: the patient can come as many times as she wants to address any questions before the surgical date; she can be accompanied by as many individuals as she deems necessary; we allocate a dedicated time for the consultation of 50 minutes per patient. Our DA tool consists of a small PowerPoint presentation or printed booklet with 17 slides, including a cover and an index. There are seven slides dedicated to autologous reconstruction (with specific slides explaining the reconstruction with the latissimus dorsi flap, deep inferior epigastric perforator flap, lipofilling techniques, and other flaps such as transverse upper gracilis, profunda artery perforator, or superior gluteal artery perforator flaps), and four slides dedicated to prosthetic reconstruction. Additionally, slides with pre and postoperative indications are included, as well as links of interest and QR codes linked to relevant patient websites.

Subsequently, this consultation is complemented by a psycho-oncologist. Additionally, the nurse plays a crucial role in providing health education and patient schools, assisting the patient in the pre- and postoperative phases.

In this study, where patients are assessed jointly by plastic surgery and gynecology, only patients undergoing immediate breast reconstruction are included, as they are evaluated before mastectomy or nodulectomy. Delayed reconstruction is evaluated in another consultation where only a plastic surgeon is present, and this model has not been implemented.

In our unit, we have implemented an additional questionnaire, currently not validated, which we call the Complementary Shared Decision Making Questionnaire—Hospital Clínico San Carlos (C-SDM-Q HCSC; Fig. 2). This questionnaire is provided simultaneously with the SDM-Q-9. Responses from both questionnaires are anonymous.

Our questionnaire consists of a Likert-type scale, where items are graded from 1 to 5, ranging from complete disagreement to complete agreement. It assesses various socio-sanitary aspects and factors related to the decision-making process. We believe that this questionnaire provides us with valuable supplementary information to enhance the decision-making process for patients. The C-SDM-Q HCSC includes questions about the consultation space, time allocated to the patient, clarity of the language used, respect for personal values, freedom to express concerns, the patient's actual understanding of the treatment, freedom of choice, information about complications and sequelae, a question about overall satisfaction, and an open-ended question.



The 9-item Shared Decision Making Questionnaire (SDM-Q-9)

Please indicate which health complaint/problem/illness the consultation was about:

Please indicate which decision was made:

Nine statements related to the decision-making in your consultation are listed below. For each statement please indicate hoy much you agree or disagree

1. My doctor made clear that a decision needs to be made.
2. My doctor wanted to know exactly how I want to be involved in making the decision.
3. My doctor told me that there are different options for treating my medical condition.
4. My doctor precisely explained the advantages and disadvantages of the treatment options.
5. My doctor helped me understand all the information.
6. My doctor asked me which treatment option I prefer.
7. My doctor and I thoroughly weighed the different treatment options.
8. My doctor and I selected a treatment option together.
9. My doctor and I reached an agreement on how to proceed.

completely disagree ☐ | strongly disagree ☐ | somewhat disagree ☐ | somewhat agree ☐ | strongly agree ☐ | completely agree ☐

Fig. 1. The SDM-Q-9, adapted from Kriston et al.[4] Adapted from *Patient Education and Counseling*, 80(1):94-96, Kriston L, Scholl I, Lars Hölzel L et al., "The 9-item Shared Decision Making Questionnaire(SDM-Q-9). Development and psychometric properties in a primary care sample." Copyright 2010, with permission from Elsevier.

Patients completed the SDM-Q-9 and our own questionnaire immediately after the conclusion of the medical appointment. Demographic data of the sample were also collected. Data analysis was performed using electronic data capture software known as REDCap (Research Electronic Data Capture).

Complementary Shared Decision Making Questionnaire
Hospital Clínico San Carlos – Breast Pathology Unit

Please answer the following questions:

What is your age?	
What is your marital status?	Single / Stable relationship / Married / Divorced / Widowed
What is your education level?	No education / Primary school / Secondary school / University
How many children do you have?	
What is your employment status?	Employed / Unemployed / Retired / Disabled

Ten statements related to your consultation are listed below. For each statement please indicate hoy much you agree or disagree, circle the number that best represents your opinion, where 1 signifies complete disagreement and 5 signifies complete agreement
Following this, there is a blank space provided to respond to the final question

	Completely Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Completely Agree
1. The space provided in this consultation has been appropriate	1	2	3	4	5
2. The time dedicated to me has been appropriate	1	2	3	4	5
3. The healthcare staff used understandable language	1	2	3	4	5
4. I have felt respected in my personal values	1	2	3	4	5
5. I have felt free to express doubts and/or concerns	1	2	3	4	5
6. I would find it easy to explain in detail and in my own words the type of surgery I am going to undergo to another person	1	2	3	4	5
7. I have been able to choose between at least two treatment options for my case, including the option of not undergoing reconstruction	1	2	3	4	5
8. I have been informed about possible surgical complications	1	2	3	4	5
9. I have been informed about potential treatment sequelae	1	2	3	4	5
10. Overall, I have felt satisfied with the course of this consultation	1	2	3	4	5
What do you think would have helped you? Do you have any suggestions for improvement?					

Fig. 2. The Complementary Shared Decision Making Questionnaire Hospital Clínico San Carlos—Breast Pathology Unit.

RESULTS

All patients provided complete data and responded to all questions in both questionnaires. Demographic data of the sample are presented in Table 1. The sample comprised 102 female patients. The mean age of the patients was 49.8 years (range 22–71). It is observed that more than half of the patients were married [53 of 102 (52%)], and the majority had secondary education [38 of 102 (37.3%)] or university degrees [49 of 102 (48%)]. Most patients had at least one child [64 of 102 (62.7%)], and the majority

Table 1. Demographic Characteristics

Demographic Characteristics (N = 102)			
Variable		**Frequency**	**Percentage**
Sex	Female	102	100%
Age	≤30	27	26.4%
	31–60	43	42.2%
	≥60	32	31.4%
Marital status	Single	16	15.7%
	Stable relationship	19	18.6%
	Married	53	52%
	Divorced	10	9.8%
	Widowed	4	3.9%
Education level	No education	3	2.9%
	Primary School	12	11.8%
	Secondary school	38	37.3%
	University	49	48%
No. children	0	37	36.3%
	1–2	52	51%
	≥3	13	12.7%
Employment status	Employed	68	66.7%
	Unemployed	16	15.7%
	Retired	14	13.7%
	Disabled	4	3.9%

were employed [68 of 102 (66.7%)]. The results obtained in the SDM-Q-9 are presented in Table 2.

From the interpretation of these data, we conclude that one of the strengths of our SDM process is the explaining of different options (71.6% of patients completely agree that different options are presented), as well as explaining the various advantages and disadvantages of these options (66.7% completely agree) and aiding the patient's understanding of this information (69.7% completely agree and 26.5% strongly agree). However, we may not be sufficiently clear in conveying that the patient should be part of the decision-making process and exploring to what extent they want to be involved, as the first two questions of the questionnaire show the lowest percentage of agreement and the highest percentage of complete disagreement and strong disagreement. After analyzing these results, our team shifted its focus not only to explaining reconstructive options but also to emphasizing that the patient is an integral part of the decision-making process.

The mean percentage of complete agreement and strong agreement for the nine assessed items is 61.5% and 24.2%, respectively. We conclude from these data that the SDM process is conducted appropriately, although there is no clear threshold above which percentage of agreement the process is optimally carried out. What is unquestionable is that there are areas for improvement in our approach. The results obtained in the C-SDM-Q HCSC are presented in Table 3.

The aspects that received the highest scores include the time dedicated to the interview (average score of 4.75 of 5 and 84% of the patients with a strong agreement), the use of appropriate language (average score of 4.7 of 5 and 78% of the patients with a strong agreement), and respect for personal values (average score of 4.71 of 5 and 80% of the patients with strong agreement). The quality of the consultation space and the perceived level of participation

Table 2. SDM-Q-9 Results

SDM-Q-9 Results	Answers—Frequency (Percentage %)				
Questions	**Completely Disagree**	**Strongly Disagree**	**Somewhat Disagree**	**Somewhat Agree**	**Strongly Agree**	**Completely Agree**
1. My doctor made clear that a decision needs to be made	8 (7.8%)	1 (1%)	4 (3.9%)	7 (6.9%)	27 (26.5%)	55 (53.9%)
2. My doctor wanted to know exactly how I want to be involved in making the decision	7 (6.9%)	4 (3.9%)	8 (7.8%)	8 (7.8%)	26 (25.5%)	49 (48%)
3. My doctor told me that there are different options for treating my medical condition	1 (1%)	2 (2%)	5 (4.9%)	4 (3.9%)	17 (16.7%)	73 (71.6%)
4. My doctor precisely explained the advantages and disadvantages of the treatment options	2 (2%)	2 (2%)	3 (2.9%)	1 (1%)	26 (25.5%)	68 (66.7%)
5. My doctor helped me understand all the information	1 (1%)	1 (1%)	0 (%)	2 (2%)	27 (26.5%)	71 (69.6%)
6. My doctor asked me which treatment option I prefer	4 (3.9%)	5 (4.9%)	4 (3.9%)	7 (6.9%)	19 (18.6%)	63 (61.8%)
7. My doctor and I thoroughly weighed the different treatment options	2 (2%)	3 (2.9%)	5 (4.9%)	6 (5.9%)	24 (23.5%)	62 (60.8%)
8. My doctor and I selected a treatment option together	4 (3.9%)	3 (2.9%)	4 (3.9%)	2 (2%)	30 (29.4%)	59 (57.8%)
9. My doctor and I reached an agreement on how to proceed	2 (2%)	3 (2.9%)	5 (4.9%)	1 (1%)	26 (25.5%)	65 (63.7%)
Global mean and percentage mean	3.4 (3.3%)	2.7 (2.6%)	4.2 (4.1%)	4.2 (4.1%)	24.7 (24.2%)	62.8 (61.5%)

Table 3. C-SDM-Q HCSC Results

C-SDM-Q HCSC—Breast Pathology Unit						
	Answers—Frequency (Percentage %)					
Questions	**Completely Disagree (1)**	**Somewhat Disagree (2)**	**Neither Agree nor Disagree (3)**	**Somewhat Agree (4)**	**Strongly Agree (5)**	**Mean from 1 to 5**
1. The space provided in this consultation has been appropriate	2 (2%)	3 (2.9%)	17 (16.7%)	26 (25.5%)	54 (%)	4.25
2. The time dedicated to me has been appropriate	1 (1%)	0 (0%)	4 (3.9%)	13 (12.7%)	84 (%)	4.75
3. The healthcare staff used understandable language	0 (0%)	2 (2%)	3 (2.9%)	19 (18.6%)	78 (%)	4.70
4. I have felt respected in my personal values	1 (1%)	1 (1%)	3 (2.9%)	17 (16.7%)	80 (%)	4.71
5. I have felt free to express doubts and/or concerns	1 (1%)	2 (2%)	8 (7.8%)	20 (19.6%)	71 (%)	4.55
6. I would find it easy to explain in detail and in my own words the type of surgery I am going to undergo to another person	1 (1%)	2 (2%)	12 (11.8%)	19 (18.6%)	68 (%)	4.48
7. I have been able to choose between at least two treatment options for my case, including the option of not undergoing reconstruction	3 (2.9%)	4 (3.9%)	8 (7.8%)	30 (29.4%)	57 (%)	4.31
8. I have been informed about possible surgical complications	2 (2%)	3 (2.9%)	5 (4.9%)	25 (24.5%)	67 (%)	4.49
9. I have been informed about potential treatment sequelae	3 (2.9%)	3 (2.9%)	6 (5.9%)	18 (17.6%)	72 (%)	4.50
10. Overall, I have felt satisfied with the course of this consultation	1 (1%)	1 (1%)	2 (2%)	22 (21.6%)	76 (%)	4.68
Global mean and percentage mean	1.5 (1.4%)	2.1 (2%)	6.7 (6.5%)	20.5 (20.1%)	69.3 (68%)	

in therapeutic choice are identified as areas for improvement, as the obtained averages were 4.25 and 4.31, respectively. However, it is notable that the scores obtained for these items fall between agreement and strong agreement.

This last point aligns with the results obtained from the SDM-Q-9, implying the need to emphasize that the patient is an integral part of the decision-making process. Merely providing information is not sufficient. Regarding the consultation space, the likely reason for the score could be that, despite having a spacious consultation room, there may frequently be six to seven individuals present: the gynecologist, the plastic surgeon, the nurse, a resident, the patient, and possibly companions.

A recurrent point in comments and suggestions is the lack of awareness that scars are left in the donor areas of the flaps. One of the most frequent concerns among patients is the scar remaining on the back in cases of reconstruction involving the latissimus dorsi muscle. Other issues mentioned in the free-text section included patients' desire for more straightforward language and the need for additional information regarding postoperative details and the duration of hospital stays in autologous reconstructions.

DISCUSSION

It is crucial to emphasize the importance of adopting an SDM model when approaching breast reconstruction, ensuring patient involvement in the therapeutic process. This has been underscored in recent years, as it has been observed that patients want their preferences and values to be taken into account, and they often lack comprehensive information regarding each treatment option.[6–10]

Women contemplating reconstruction tend to express relatively low levels of satisfaction with the information provided regarding the risks of breast reconstruction, healing time, and recovery. The uncertainty associated with the decision-making process for breast reconstruction can lead to adverse psychosocial outcomes, such as high levels of decisional conflict or regret.[11]

According to certain studies, no physician uses a fully informed model, and in fact, doctors who adopt a physician-centered model approach often perceive patients as having little interest in participating in the decision-making process, considering this model to be of limited utility.[6] Some medical professionals exhibit skepticism toward this model and believe it may not be suitable for all patients. They even argue that limiting available information might mitigate distress and anxiety.[12] Patients may have different levels of interest in participating in the therapeutic decision, and this is explored throughout the consultation. We found patients who prefer to defer the decision to the doctors and patients with a high degree of autonomy. The final decision always rests with the patient. Although the physician may recommend or guide toward one reconstructive technique or another, it is ultimately the patient who has the final say, and there are patients who may even decide not to undergo reconstruction. It is true that some patients are more involved in the decision-making process than others.

In our team, we believe that the paternalistic approach is a mistake. Even in cases where patients prefer limited

information and want the physician to make the final decision, if SDM is executed appropriately, their needs and preferences will be explored, and actions will be taken while respecting their choices and values, involving them less in the final decision. This approach has been supported by numerous studies showing that DAs for breast reconstruction patients enhance satisfaction with information, increase perceived participation in the decision-making process, and reduce decisional conflict.[3,13,14] There are some DA tools that have been tested in randomized clinical trials. An example is the BREASTChoice tool, which also allows estimating patients' personal risk of potential complications of reconstruction, in addition to helping patients understand the pros and cons of different options.[15]

Assessing the proper implementation of a decision-making model can be challenging and subjective. Surgeons can clearly observe factors such as flap necrosis percentage or the loss or gain of limb strength and mobility, but aspects like information transmission might present more of a challenge when attempting to evaluate objectively.

To aid us in addressing this issue, scales such as the SDM-Q-9[4] have been developed, and in our case, its validated Spanish translation.[5] These tools prove to be a reliable, concise, and well-accepted instrument.

In our experience, having the opportunity to analyze the results obtained from these scales allows us to assess how the model is being implemented and gain valuable feedback. This feedback helps us identify areas for improvement to optimize our SDM approach and the comprehensive development of our consultation.

The implementation of the SDM model in our center involved much more than the utilization of DA tools, structuring the interview according to this model, or exploring patient preferences. It entailed a structural change in the consultations, as well as in the personnel and schedule.

This is because we transitioned from separate consultations by gynecology and plastic surgery to a joint consultation with the characteristics described previously, in which the patient is included in the decision-making process and is allotted 50 minutes per consultation, in addition to being able to revisit as needed.

In the previous protocol, from which we did not collect data or patient opinions through any of the mentioned surveys, coordination between the gynecology/oncology team and the plastic surgery team was much lower, and reconstruction was considered in a different consultation on a different day.

It is evident that the ways information is transmitted to patients and decisions are made vary across different centers where breast reconstruction is carried out. Physicians adopt one model or another based on personal preferences and beliefs, and they may not even reflect on their choice. In our team, we firmly believe that SDM brings clear benefits. It improves the patient's understanding of their condition and the therapeutic options available to them, enhances the accuracy of risk perception, reduces decisional conflict, and enhances physician-patient communication.

In this study, we evaluate and share our experience with 102 patients. However, it is necessary to continue applying SDM and expand the sample size and its analysis to further optimize the implementation of the model. The relatively small sample size could be considered a limitation of the study.

From our personal experience, adopting this model has allowed us to perceive a tangible enhancement, as the scores on the questionnaires have been steadily improving over time. The entire team has become more aware of the needs and has continued to disseminate the idea among professionals through training workshops.

Given that our hospital serves a population with a high level of education, as reflected in the surveys, this may pose a limitation to the study because these patients may be most keen on listening and answering properly. Another significant limitation of the study is that we do not have any cohort for comparison because the consultation is systematically conducted using this model

Further studies are necessary, continuing to demonstrate the advantages of SDM, as well as standardizing the assessment scales for this model and their application.

CONCLUSIONS

The SDM approach enables the incorporation of both scientific evidence and patient preferences into our consultations within multidisciplinary breast pathology units. The approach has a clear methodology and there is increasing evidence in its favor.

DAs enhance patient satisfaction, increase perceived participation in the decision-making process, and mitigate decisional conflict. There are areas for improvement within the SDM strategy, and they are detectable through the use of scales.

Nowadays, patient-centered care practice should incorporate tools like SDM that empower patients and enhance long-term satisfaction with surgical outcomes. Although challenges in information transmission and patient involvement persist, adopting an SDM model has potential benefits that warrant further investigation.

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DISCLOSURE

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

REFERENCES

1. Elwyn G, Laitner S, Coulter A, et al. Implementing shared decision making in the NHS. *BMJ.* 2010;341:c5146.
2. Elwyn G, Frosch D, Thomson R, et al. Shared decision making: a model for clinical practice. *J Gen Intern Med.* 2012;27:1361–1367.
3. Berlin NL, Tandon VJ, Hawley ST, et al. Feasibility and efficacy of decision aids to improve decision making for postmastectomy breast reconstruction: a systematic review and meta-analysis. *Med Decis Making.* 2019;39:5–20.

4. Kriston L, Scholl I, Hölzel L, et al. The 9-item Shared Decision Making Questionnaire (SDM-Q-9). Development and psychometric properties in a primary care sample. *Patient Educ Couns*. 2010;80:94–99.
5. Navarrete Floriano G, Ramírez Aranda JM, Rodríguez González AM, et al. Validación de Shared Decision Making Questionnaire—physician version (SDM-Q-Doc) en español. *Rev Clín Med Fam*. 2020;13:190–197. Available at https://scielo.isciii.es/scielo.php?script=sci_arttext&pid=S1699-695X2020000300190. Accessed April 17, 2024.
6. Nguyen F, Moumjid N, Charles C, et al. Treatment decision-making in the medical encounter: comparing the attitudes of French surgeons and their patients in breast cancer care. *Patient Educ Couns*. 2014;94:230–237.
7. Lam WWT, Kwok M, Chan M, et al. Does the use of shared decision-making consultation behaviors increase treatment decision-making satisfaction among Chinese women facing decision for breast cancer surgery? *Patient Educ Couns*. 2014;94:243–249.
8. Hasak JM, Myckatyn TM, Grabinski VF, et al. Stakeholders' perspectives on postmastectomy breast reconstruction: recognizing ways to improve shared decision making. *Plast Reconstr Surg Glob Open*. 2017;5:e1569.
9. Dahlbäck C, Manjer J, Rehn M, et al. Patients undergoing breast-conserving surgery can benefit from the opportunity to participate in choosing their surgical technique. *World J Surg*. 2017;41:734–741.
10. Mitchell S, Gass J, Hanna M. How well informed do patients feel about their breast cancer surgery options? Findings from a nationwide survey of women after lumpectomy and/or mastectomy. *J Am Coll Surg*. 2018;226:134–146.e3.
11. Savelberg W, Boersma LJ, Smidt M, et al. Does lack of deeper understanding of shared decision making explains the suboptimal performance on crucial parts of it? An example from breast cancer care. *Eur J Oncol*. 2019;38:92–97.
12. Caldon LJM, Collins KA, Reed MW, et al; BresDex Group. Clinicians' concerns about decision support interventions for patients facing breast cancer surgery options: understanding the challenge of implementing shared decision-making. *Health Expect*. 2011;14:133–146.
13. Schubart JR, Dominici LS, Farnan M, et al. Shared decision making in breast cancer: national practice patterns of surgeons. *Ann Surg Oncol*. 2013;20:3323–3329.
14. Margenthaler JA, Ollila DW. Breast conservation therapy versus mastectomy: shared decision-making strategies and overcoming decisional conflicts in your patients. *Ann Surg Oncol*. 2016;23:3133–3137.
15. Politi MC, Lee CN, Philpott-Streiff SE, et al. A randomized controlled trial evaluating the BREASTChoice tool for personalized decision support about breast reconstruction after mastectomy. *Ann Surg*. 2020;271:230–237.