

# An Essential Infinitebook for Plastic and Reconstructive Surgery Preoperative Planning

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**Background:** Over the past decade, plastic and reconstructive procedures have notably increased, driven by greater accessibility and aesthetic preferences. Despite surgeons' efforts, patient satisfaction faces challenges due to unrealistic expectations rooted in inadequate knowledge. Preoperative consultations present an opportune moment to address this issue. This study introduces a new approach for preoperative planning: the Infinitebook. Designed to enhance patients' understanding and satisfaction, it facilitates real-time procedure explanations and helps manage expectations.

**Methods:** The Infinitebook, a versatile A5-sized notebook-like resource, aids surgeons in illustrating procedures such as abdominoplasty, liposuction, and breast reconstruction, enhancing patient understanding through real-time interaction, personalized illustrations, and sustainable practices, facilitating improved communication in plastic and reconstructive surgery. A cross-sectional study compared 2 groups: 1 using the Infinitebook-assisted explanation approach and another without. A questionnaire evaluated its impact on patients' procedural understanding level and satisfaction with the preoperative consultation. Statistical analysis was conducted using IBM SPSS Statistics.

**Results:** Participants (n = 46) were systematically sampled and categorized by demographics. Two groups (n = 23 each) received preoperative consultations with and without the Infinitebook. Perceptions on aspects of preoperative consultations were assessed. The Infinitebook received positive feedback, with all participants (100%) recommending it.

**Conclusions:** This article introduces the Infinitebook, an environmentally friendly tool enhancing preoperative preparation, patient comprehension, and satisfaction in plastic and reconstructive surgery. It offers a customizable solution with potential for global implementation, with scope for further research. This study lays groundwork for future advancements in preoperative consultations and planning, promoting person-centered healthcare, and integrating new technologies. (*Plast Reconstr Surg Glob Open* 2024; 12:e6382; doi: [10.1097/GOX.0000000000006382](https://doi.org/10.1097/GOX.0000000000006382); Published online 6 December 2024.)

## INTRODUCTION

Plastic and reconstructive surgery has surged by 132% since 2000, driven by greater accessibility and the growing

popularity of aesthetic surgical treatments.<sup>1-3</sup> This trend is gradually shifting toward minimally invasive procedures, better postsurgery outcomes, swift recovery, and cost efficiency.<sup>2,4-6</sup>

Technological and scientific advancements have facilitated healthcare information outlets, yet unrealistic expectations can still undermine patient satisfaction. Thus, preoperative consultations are pivotal for establishing patient trust and delivering state-of-the-art services. They are vital for discussing procedure benefits, risks, and complications, highlighting the role of health literacy while

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offering a key opportunity to address expectations and impart verbal and visual information to support informed decision-making.<sup>1,4,7,8</sup>

For plastic and reconstructive surgery preoperative planning, this study introduces the Infinitebook, an easily accessible, practical, informative, and eco-friendly tool that helps surgeons illustrate, write, and explain surgical procedures in real time. This resource aims to increase satisfaction with preoperative consultations and the surgeon by enhancing patients' comprehension of surgical procedures and scarring, benefiting those with medical illiteracy, and managing expectations.<sup>3,8</sup> We hypothesize that this approach could bridge the gap between conveyed information, consent forms, patients' understanding, and achievable outcomes, ensuring a more comprehensive understanding of the procedures, with better overall satisfaction, through accessible, simplified informational materials.

## METHODS

### Infinitebook

The Infinitebook is a versatile, notebook-like, A5-sized (148 × 210 mm) resource that expands to 153 × 210 mm with rings. It serves as an illustrative resource and allows surgeons to draw and/or write to outline various types of incisions, excision patterns, flap designs, and potential scars associated with procedures such as abdominoplasty, liposuction, arm lift (brachioplasty), thigh lift (cruroplasty), face lift, blepharoplasty, otoplasty, rhinoplasty, breast reduction/mastopexy, breast augmentation, expander-implant breast reconstruction, latissimus dorsi flap breast reconstruction, transverse rectus abdominis muscle flap breast reconstruction, deep inferior epigastric perforator free flap microsurgical breast reconstruction, and nipple-areolar complex reconstruction (Fig. 1).

Designed to facilitate real-time patient–surgeon interactions, the Infinitebook helps explain surgical procedures, manage misconceptions, and provide comprehensive patient education. This resource features additional blank pages for unlimited drawings and text, enhancing the communication and explanation of complex surgical concepts to patients (Fig. 2).

The Infinitebook offers numerous benefits. For patients, it improves understanding through visual aids that clarify surgical procedures, potentially reducing anxiety and enhancing informed consent. Personalized, detailed illustrations help patients visualize expected outcomes and recovery processes, fostering patient–doctor communication and trust. For surgeons, real-time drawing enables clear explanations during preoperative consultations, enhancing communication and shared decision-making. Moreover, the Infinitebook is an efficient and creative resource, minimizing friction with paper and reducing writing reaction time, which streamlines planning and allows detailed exploration of procedures with patients. Additionally, this reusable, paper-free, and portable book supports sustainable healthcare practices without compromising quality or efficiency, by promoting recyclable materials and reducing waste associated with traditional paper.

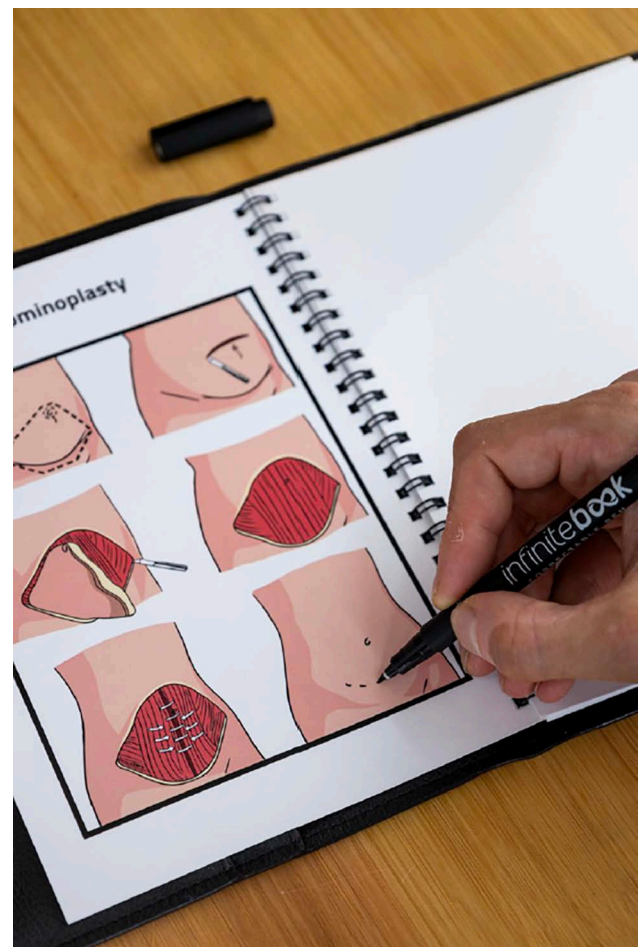
### Takeaways

**Question:** What was the purpose of creating an Infinitebook for plastic and reconstructive surgery preoperative planning?

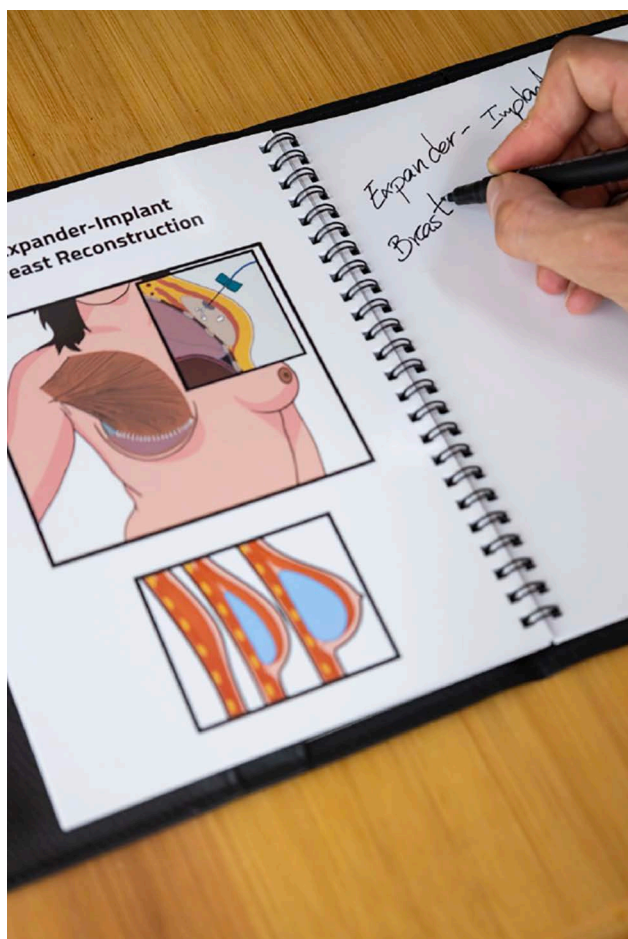
**Findings:** The Infinitebook is a versatile and eco-friendly notebook-like tool designed to enhance patient understanding and satisfaction in preoperative consultations. With detailed surgical illustrations, it allows surgeons to visually explain incisions, excisions, flaps, and scarring in real time by sketching directly onto the illustrations. Additionally, its paper-free, recyclable design supports sustainability, combining modern patient education with eco-conscious practices. Future research can explore broader applications and assess its impacts.

**Meaning:** This modern approach bridges the gap between conveyed information, consent forms, shared decision-making, patient understanding, and achievable outcomes.

The Infinitebook represents a modern approach to surgical planning, integrating environmental sustainability with enhanced communication and educational benefits for both patients and surgeons. In preoperative



**Fig. 1.** A photograph showing how a surgeon can draw over the illustrations on the Infinitebook.



**Fig. 2.** A photograph showing the Infinitebook's additional blank pages for drawing and writing, facilitating further understanding.

settings, its practical applications include real-time illustration over preprinted anatomically correct representations of procedures, underscoring its role in improving patient outcomes and supporting surgeons in delivering high-quality care.

For surgeons' convenience and practicality, it can be optionally included in a comprehensive preoperative toolkit, alongside rulers and marking aids, enabling thorough preparation and planning for surgical procedures (Fig. 3). It could feature a 40-cm crystal polycarbonate ruler for abdominoplasty, highly malleable and heat-resistant for sterilization, offering a level 0 watermark for horizontal stability. Based on the study by Borille et al, it includes 2 marking options: an angled upper marking (superior border) for thinner patients and a smooth curve (inferior border) for larger patients, improving scar symmetry and having widespread applicability.<sup>9,10</sup>

Also included are a pliable breast reduction/mastopexy marking aid with a silicone cover and adjustable aperture for the nipple-areola complex, allowing better 3-dimensional adaptation and adhesion to breast contours while minimizing skin removal; small 160 mm thermoplastic polyurethane rulers, flexible and durable; resin



**Fig. 3.** A photograph showing how the Infinitebook can be included in a surgeon's kit with other preoperative tools.

blepharoplasty marking tweezers for pinch tests, ensuring disinfection and shape retention; and surgical easy-removal skin marker pens for added convenience.

### Study Design and Setting

This cross-sectional study included two groups: control and Infinitebook. It was conducted at Centro Hospitalar Universitário de São João in Porto, Portugal, in collaboration with the plastic and reconstructive surgery department.

### Study Population and Sampling

Participants were recruited for 3 months and informed about the study's anonymous and voluntary nature, as well as its requirements.

Participants were chosen based on inclusion/exclusion criteria, with random population order:

- All adult patients undergoing any or multiple plastic and reconstructive procedures covered by the Infinitebook were eligible, unless they refused participation.

### Questionnaire

To gather demographic data; medical and surgical history; and patients' insights into the specifics of the preoperative consultation, understanding of the surgery, and their satisfaction with the consultation, we designed a questionnaire. (See Appendix, Supplemental Digital Content 1, which shows the questionnaire translated into English, <http://links.lww.com/PRSGO/D770>.) It was based on the Press Ganey Medical Practice survey and the SERVQUAL scale, tailored to be simple, objective and easy to administer, filling the gap for a specific preoperative consultation questionnaire for plastic and reconstructive surgery patients.<sup>11,12</sup> An established surgeon distributed this cost-free, paper-based questionnaire, which takes approximately 5 minutes to complete, to patients at the end of their preoperative consultations.

### Pilot Study

No pilot study was conducted before data collection, but the surgeon who distributed the questionnaire, not being its author, found it easy to follow, clear, and understandable, so the instrument was not altered.



**Statistical Design and Data Analysis**

Data were verified, coded, and analyzed using IBM SPSS Statistics for Mac Software, version 29.0.0.0.0 (241). Descriptive analysis was performed, expressing data in absolute or relative frequency, mean ± SD, range, or median, depending on variable characteristics.

**Bias Considerations**

In a hospital setting study, social desirability bias was mitigated by using self-administered questionnaires. Cognitive bias was acknowledged by collecting patients’ medical and surgical history. Sample selection bias was deemed minor due to the study’s nature. The use of dichotomous and absolute questions in the questionnaires could introduce bias. Coercion bias was deemed unlikely due to the voluntary participation of patients and the assurances provided to them.

**Administrative and Ethical Considerations**

Permission and approval from the Centro Hospitalar Universitário de São João Ethics Committee and the Department of Plastic and Reconstructive Surgery were obtained. Verbal and written consent were secured from participants, ensuring data confidentiality.

**RESULTS**

Forty-six patients were evenly split into a control group without the Infinitebook approach and an experimental group using it. Participants’ perceptions were evaluated on several parameters, as presented later.

In the control group, 17.4% of participants were 18–39 years of age, whereas in the Infinitebook group, 50% were 40–49 years. The mean ages were 38.71 ± 3.847 years for the control group and 47.5 ± 3.052 years for the Infinitebook group, with slight positive skewness in both distributions, which was not statistically significant (Table 1).

The gender distribution was predominantly women in both groups (91.3% in the control group and 87% in the Infinitebook group). Educational backgrounds showed that 47.8% of the control group and 43.5% of the Infinitebook group did not disclose education levels. The most common were high school (26.1%) and higher education (26.1% and 21.7%, respectively). One participant with the lowest consultation rating (“good”) had an

elementary school education. Employment status varied across both groups, with 47.8% not providing a response. (See graph, **Supplementary Digital Content 1**, which displays a graph that shows participants’ professional activity. A, Control group. B, Infinitebook group. <http://links.lww.com/PRSGO/D694>.)

Overall satisfaction with preoperative consultation, appointment length, surgical procedure explanation, and surgeon’s care were rated very good or good by most participants, with the lowest rating (“satisfactory”) from the control group. Satisfaction with the surgeon’s knowledge, communication skills, availability for clarification, and ability to provide clear explanations was high in both groups, with the lowest rating (“satisfactory”) again from the control group.

In terms of surgical history, 78.3% of the control group had previous procedures, commonly cesarean section, abdominoplasty, and gastric bypass. In the Infinitebook group, 60.9% had prior procedures, with appendectomy, breast reduction, and tonsillectomy being the most common procedures. (See graph, **Supplemental Digital Content 2**, which displays a graph that shows participants’ past procedures. A, Control group. B, Infinitebook group. <http://links.lww.com/PRSGO/D695>.) Clinical history showed that most participants (78.3% in the control group and 82.6% in the Infinitebook group) had no known illnesses, though some reported conditions such as arterial hypertension, diabetes, dyslipidemia, and hypothyroidism.

In both groups, 56.5% of participants believed that the risks associated with plastic and reconstructive surgery were comparable to other surgical areas. The most commonly chosen procedures were liposuction (30.4%), breast augmentation (17.4%), and abdominoplasty (13%) in the control group, and abdominoplasty (21.7%) and breast augmentation (17.4%) in the Infinitebook group (Table 2).

Participants in both groups had high expectations regarding their procedures, with 91.3% expressing very high or high expectations (Table 3). All participants were satisfied with the explanations provided, which reduced the need for additional information (Table 4). Most understood the techniques involved in their proposed procedures (78% in the control group, 70% in the Infinitebook group) and were aware of the location and

**Table 1. Age as a Continuous Variable**

		Control Group (n = 23)	Infinitebook Group (n = 23)
N	Valid	7	16
	Missing	16	7
Mean		38.71	47.50
Standard error of mean		3.847	3.052
Median		37.00	47.00
SD		10.177	12.209
Variance		103.571	149.067
Skewness		0.164	0.470
Standard error of skewness		0.794	0.564
Range		27	41
Minimum		26	30
Maximum		53	71

**Table 2. List of Procedures Participants Will Undergo**

	Control Group (n = 23)				Infinitebook Group (n = 23)			
	Frequency	Percentage	Valid Percentage	Cumulative Percentage	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid								
Abdominoplasty	3	13.0	13.0	13.0	5	21.7	21.7	21.7
Abdominoplasty and breast augmentation	2	8.7	8.7	21.7	—	—	—	—
Abdominoplasty and liposuction	1	4.3	4.3	26.1	—	—	—	—
Abdominoplasty, liposuction, and breast augmentation	1	4.3	4.3	30.4	—	—	—	—
Blepharoplasty (inferior)	—	—	—	—	1	4.3	4.3	26.0
Blepharoplasty (upper)	—	—	—	—	2	8.7	8.7	34.7
Blepharoplasty (upper and inferior)	—	—	—	—	2	8.7	8.7	43.4
Blepharoplasty (upper and inferior) and face lift	—	—	—	—	1	4.3	4.3	47.7
Breast augmentation	4	17.4	17.4	47.8	4	17.4	17.4	65.1
Breast reduction/mastopexy	2	8.7	8.7	56.5	2	8.7	8.7	73.8
Face lift	—	—	—	—	1	4.3	4.3	78.1
Liposuction	7	30.4	30.4	87.0	1	4.3	4.3	82.4
Liposuction and Breast reduction/mastopexy	1	4.3	4.3	91.3	—	—	—	—
Liposuction, thigh lift (cruroplasty), and arm lift (brachioplasty)	—	—	—	—	1	4.3	4.3	86.7
Otoplasty	—	—	—	—	1	4.3	4.3	91.0
Rhinoplasty	—	—	—	—	1	4.3	4.3	95.3
Thigh lift (cruroplasty)	2	8.7	8.7	100.0	—	—	—	—
At the moment, none	—	—	—	—	1	4.3	4.3	100.0
Total	23	100.0	100.0		23	100.0	100.0	

**Table 3. Participants’ Level of Expectation Regarding Their Surgery**

	Control Group (n = 23)				Infinitebook Group (n = 23)			
	Frequency	Percentage	Valid Percentage	Cumulative Percentage	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid								
High	12	52.2	52.2	52.2	8	34.8	34.8	34.8
Neutral	1	4.3	4.3	56.5	2	8.7	8.7	43.5
Very high	9	39.1	39.1	95.7	13	56.5	56.5	100.0
Very low	1	4.3	4.3	100.0	—	—	—	—
Total	23	100.0	100.0		23	100.0	100.0	

**Table 4. Participants’ Satisfaction With Explanation Provided by the Surgeon**

	Control Group (n = 23)				Infinitebook Group (n = 23)			
	Frequency	Percentage	Valid Percentage	Cumulative Percentage	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid								
I am satisfied	23	100.0	100.0	100.0	23	100.0	100.0	100.0

size of their incisions and scars (91.3% in both groups) (Tables 5, 6).

Finally, all participants in the Infinitebook group expressed willingness to recommend this resource, indicating high satisfaction (Table 7).

### DISCUSSION

The present study investigated the Infinitebook’s impact on patients’ perceptions and experiences during preoperative consultations, revealing significant insights into aspects such as demographic profiles, satisfaction levels, and comprehension.

Age distribution demonstrated a slight shift toward older participants in the Infinitebook group. Older patients tend to report higher satisfaction, likely due to experiencing more patient-centered interactions with healthcare providers.<sup>13-15</sup>

Gender distribution skewed toward women, reflecting prevailing sociocultural pressures emphasizing physical attractiveness, thereby making women more inclined to undergo cosmetic procedures.<sup>2</sup>

Educational backgrounds varied, with a significant proportion not disclosing their education levels. Despite trends linking lower education with higher satisfaction,

**Table 5. Participants’ Understanding of the Techniques Used in Their Surgery**

	Control Group (n = 23)				Infinitebook Group (n = 23)			
	Frequency	Percentage	Valid Percentage	Cumulative Percentage	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid								
No response	1	4.3	4.3	4.3	—	—	—	—
No	4	17.4	17.4	21.7	7	30.4	30.4	30.4
Yes	18	78.3	78.3	100.0	16	69.6	69.6	100.0
Total	23	100.0	100.0		23	100.0	100.0	

**Table 6. Participants’ Awareness of Location and Size of Incision/Scar**

	Control Group (n = 23)				Infinitebook Group (n = 23)			
	Frequency	Percentage	Valid Percentage	Cumulative Percentage	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid								
No response	1	4.3	4.3	4.3	—	—	—	—
No	1	4.3	4.3	8.7	2	8.7	8.7	8.7
Yes	21	91.3	91.3	100.0	21	91.3	91.3	100.0
Total	23	100.0	100.0		23	100.0	100.0	

**Table 7. Participants Recommend the Infinitebook-assisted Explanation Approach**

		Infinitebook Group (n = 23)			
		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Yes	23	100.0	100.0	100.0

1 participant with an elementary school education rated preoperative consultation satisfaction lower, suggesting a complex relationship between education and health-care perception, as noted by Zun et al 2018, as cited in A’aqoulah et al 2022.<sup>13-15</sup>

Employment status diversity did not significantly influence patient satisfaction or care quality ratings, contrary to previous studies.<sup>13,15</sup>

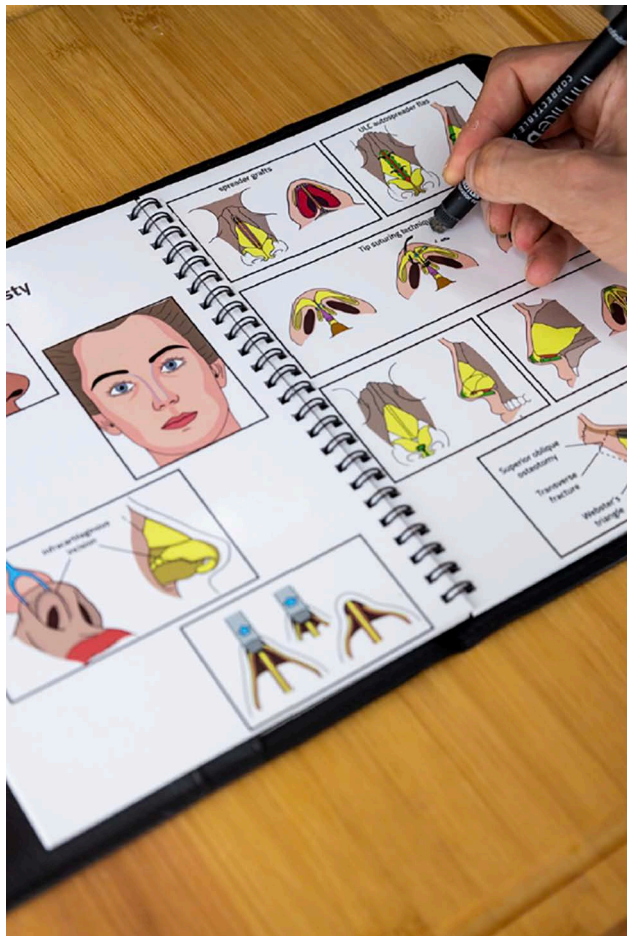
Most participants rated their satisfaction with the preoperative consultation positively, with the control group providing the lowest ratings. Both groups received the questionnaire from the same surgeon who conducted the consultations. The potential bias of patients rating their satisfaction highly to please the surgeon, who was likely to perform their surgery, cannot be excluded. The surgeon delivered identical theoretical explanations to both groups, regardless of use of the Infinitebook. This consistency likely accounts for the similar satisfaction ratings observed, particularly in understanding techniques and location and size of incisions and scars. Additionally, the surgeon’s explanations, even without the Infinitebook, may have included hand-drawn illustrations to aid patient understanding, further contributing to the positive satisfaction ratings. Surgeon-related factors significantly impact patient satisfaction across medical specialties, shaping perceptions and expectations.<sup>16-18</sup> Moreover, aside from the surgeon’s skill, clear and standardized communication is crucial for safe practices, mitigating litigation risks, and addressing procedure details, limitations, complications, and postoperative care.<sup>5,6,19</sup> Participants generally reported a clear understanding of the surgical techniques as well as details about incisions and scars. However, studies note

that patients often struggle to understand procedural information and seek it before preoperative consultations due to factors like anxiety, time constraints, age, education, medical terminology, and cognitive abilities. Increasingly, patients turn to online platforms, especially social media, for medical information regarding risks, benefits, outcomes, and techniques.<sup>1,2,5,7,8,19-21</sup> Despite this, physicians remain the primary reliable source.<sup>22</sup> Nevertheless, online materials may lack accuracy, requiring surgeons to invest additional time addressing unrealistic expectations.<sup>21</sup>

The Infinitebook can be a valuable resource for surgeons in providing satisfactory explanations, enabling clear communication of procedure details to patients, and reducing the need for additional information. All participants expressed willingness to recommend this approach, indicating overall satisfaction and highlighting the Infinitebook’s role in combining technology, sustainability, and patient-centricity in plastic and reconstructive surgery, hopefully aiding in further advancements in this field. (**See Video [online]**, which displays the Infinitebook and demonstrates how to effortlessly write, draw, and clean the pages of this versatile tool.)

The Infinitebook is a versatile, durable resource that enables surgeons to seamlessly illustrate, write, and explain procedures in real-time, minimizing friction with paper and reducing writing reaction time. It provides a dynamic platform for preoperative planning, fostering creativity, innovation, learning, and productivity while meeting the growing need for environmentally sustainable practices with vegan, eco-friendly, recyclable materials and plant-based ink from renewable resources. All materials used are certified by PEFC/02-31-80 Certificate, European Eco-label, ISO9001,





**Fig. 4.** A photograph showing how the Infinitebook is reusable, allowing for unlimited rewriting and deletion.

ISO14001, ISO18001, EMAS, European Regulation for Toy Safety, Low Heavy Metal Content, ISO 22000, OHSAS 18001, ISO 50001, FSC, PEFCM.

Its reusable, paper-free, and portable whiteboard technology supports unlimited rewriting and deletion, fostering creativity and efficiency (Fig. 4). It is recycled by removing the rings and core, placing them in designated recycling bins (yellow and blue, respectively). A cleaning kit is included, comprising a microfiber cloth, a refillable spray bottle, and a sponge, ensuring the Infinitebook's longevity and cleanliness (Fig. 5). Cleaning is advisable at least once a week. Water and the sponge are used for ink over a week old, whereas fresh ink is cleaned using the microfiber cloth and spray bottle. A mini felt-tip eraser marker is included for minor corrections, and the Staedtler Lumocolor Correctable markers in black and red are recommended for use, considering their nonstaining properties.

In plastic and reconstructive surgery, patients often request visual aids such as photographs due to the pictorial superiority effect, which posits that information presented visually is better assimilated and retained than text alone. Although some physicians use digital imaging, concerns arise due to its 2-dimensional representation and potential for misleading patients.<sup>23</sup> Patients also fixate on preoperative



**Fig. 5.** A photograph showing the Infinitebook and its cleaning kit.

images, leading to disappointment if slight differences between images and outcomes occur, even if successful.<sup>23</sup> The Canadian Medical Protection Agency expressed concern about online cosmetic surgery photograph galleries' bias, showcasing the best surgical results, and ethical and medical-legal risks due to the widespread use of third-party digital images.<sup>19,20,23,24</sup> Drawing emerges as a viable alternative. The Canadian Society of Plastic Surgeons endorses illustrations and sketches for their appropriateness and effectiveness in patient communication. As Weber et al<sup>25</sup> assert, drawing is a reliable, inexpensive and safe method. Patients often value surgeons' sketching ability, viewing it as an indication of their skillset.<sup>23</sup> Research shows a link between a surgeon's drawing skill and surgical proficiency, suggesting that drawing is a tangible representation of a surgeon's mental imagery and conceptual planning.<sup>25</sup> Neuropsychological tests suggest drawing may be superior in representing surgical skill. A surgeon's inability to draw a procedure often points to a lack of understanding rather than artistic talent, underscoring the connection between drawing and surgical proficiency.<sup>25</sup>

Traditional hand-drawn procedures can be misleading, time-consuming, and wasteful, leading to legal consequences if poorly done. A satisfactory compromise is digital sketching printed on the Infinitebook, which allows accurate representation and interactive communication

with real-time hand-drawn sketches for further clarification.<sup>20,23</sup> Rather than simply outlining the procedures step by step, this method visually illustrates incision locations and potential scars while avoiding excessive medical jargon. It offers a clear and concise explanation of the surgical procedure, accommodating time constraints during consultations. Integrating resources such as the Infinitebook into surgical practice offers promising avenues for enhancing efficiency and patient satisfaction. However, the debate over adopting digital methods in healthcare remains complex and revolves around whether technology hinders empathic patient care or enhances personalized treatment and patient experiences, recognizing potential benefits but grappling with their time-consuming and costly nature.<sup>26</sup> A 2020 survey on technologies like self-check-in, robotic care assistants, and AI triage on person-centered care showed mixed responses, with only self-check-in favored. Concerns were raised about their deployment and impact on empathetic care, showcasing the challenges in maintaining clinician-patient relationships, engaging in shared decision-making, and preserving empathy. These aspects rely on social and emotional intelligence, which are highly valued and not easily replicated by technology.<sup>26</sup>

In fact, the Health Foundation prioritizes person-centeredness in healthcare, aligning with Halpern's focus on empathy in clinician-patient interactions and highlighting the importance of face-to-face communication.<sup>26</sup> Studies suggest that older patients and those with assigned medical providers show reluctance toward technology integration, preferring human doctors in treatment decisions and expressing concerns about the perceived impersonal nature of robotic care despite its potential benefits.<sup>26</sup>

Although this study provides valuable insights, some limitations should be acknowledged, including its cross-sectional design, small sample size, and geographic constraints. These factors increase susceptibility to sampling error, limit the extent to which findings can be generalized, and require cautious interpretation.

To further elucidate the generalizability and applicability of interactive resources, such as the Infinitebook, in enhancing patient-doctor interactions and healthcare delivery, future research would benefit from broader and more representative comparative studies encompassing various surgical specialties and multiple healthcare facilities or institutions across Portugal and globally.

Additionally, given the reliance on self-reported data, which may introduce potential biases in participant responses, particularly concerning the similar understanding of surgical techniques and awareness of incision and scar details observed in both groups, we cannot definitively assert the lack of impact of the Infinitebook approach. Therefore, further exploration of the Infinitebook's effectiveness is warranted, including comprehensive evaluations to thoroughly measure patients' knowledge acquisition and retention, along with comparative analysis to robustly assess the resource's impact.

Despite these needs, our study successfully gauged public acceptance of this approach, suggesting that tailored technology applications in healthcare have the potential

to significantly enhance plastic and reconstructive surgery services in the future.

## CONCLUSIONS

This article presents an environmentally friendly and useful preliminary resource that serves as a foundation for introducing alternative methodologies aimed at enhancing preoperative preparation, patient understanding, shared decision-making, and satisfaction in plastic and reconstructive surgery.

The Infinitebook provides a systematic, replicable, and functional solution, customizable and adaptable to evolving practices and future expert input, thereby enhancing healthcare services and standards when efficiently implemented across medical facilities worldwide.

Nevertheless, further research is necessary to broaden the studied population, understand public attitudes, monitor evolving norms, and strategize for sustaining and improving person-centered healthcare. Additionally, leveraging the benefits of emerging technologies and bridging theoretical and practical expertise will contribute to maximize physician-patient relationships and ensure fair healthcare services.<sup>11,26</sup>

This study enables the adoption of refined methodologies in subsequent research endeavors, evaluates the feasibility of larger projects, and ensures attainable objectives. Demonstrating its viability, we anticipate that this initial study will inspire future research efforts, ultimately enriching the field of plastic and reconstructive surgery.

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## DISCLOSURES

*The authors have no financial interest to declare in relation to the content of this article. This study was fully self-funded.*

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