

The influence of the social media on decision making for breast augmentation procedure in Turkish female patients

Türk kadın hastalarda meme büyütme işlemi için sosyal medyanın ameliyat isteği ve kararı üzerindeki etkisi

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Abstract

Purpose: Social media serves as a powerful tool in cosmetic medicine to gain more knowledge and facilitate decision-making and interaction with other patients. This study aims to assess the influence of social media on desire and decision-making for breast augmentation procedures in Turkish female patients.

Materials and methods: A total of 79 female patients who applied to our clinic and had breast augmentation between February 2023 and August 2024 were enrolled in this study. All patients underwent breast augmentation with silicone gel implants by the senior author. A 7-question survey was conducted to evaluate the effects of social media on the desire to undergo surgery and the decision to undergo surgery. Patients' age, occupation, average daily social media usage time, and previous surgery history were also assessed.

Results: According to the questionnaire findings, the vast majority of the patients (39%, 31 patients) strongly agreed on the impact of social media on undergoing breast augmentation. 33 of the patients verified the amplifying impact of social media on the desire to have surgery. In terms of positive effectiveness in choosing a surgeon, 94% of patients strongly agreed or agreed.

Conclusion: During the decision-making process, social media presents various beneficial information. Social media is very important in establishing healthy communication between patients and healthcare professionals.

Keywords: Breast augmentation, social media, Instagram, decision-making.

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Öz

Amaç: Sosyal medya, estetik ve kozmetik tıbbi işlemler hakkında daha fazla bilgi edinmek, karar verme sürecinin ve diğer hastalarla ile etkileşimi kolaylaştırmak için güçlü bir araç olarak sık olarak kullanılmaktadır. Bu çalışma, sosyal medyanın Türk kadın hastalarda meme büyütme işlemleri için istek ve karar alma üzerindeki etkisini değerlendirmeyi amaçlamaktadır.

Gereç ve yöntem: Bu çalışmaya Şubat 2023 ile Ağustos 2024 arasında kliniğimize başvuran ve meme büyütme ameliyatı geçiren toplam 79 kadın hasta dahil edildi. Tüm hastalara yazar tarafından silikon jel implantlarla meme büyütme ameliyatı yapıldı. Sosyal medyanın ameliyat olma isteği ve ameliyat olma kararı üzerindeki etkilerini değerlendirmek için 7 sorudan oluşan bir anket yapıldı. Hastaların yaşı, mesleği, ortalama günlük sosyal medya kullanım süresi ve önceki ameliyat geçmişi de değerlendirildi.

Bulgular: Anket bulgularına göre hastaların büyük çoğunluğu (%39, 31 hasta) sosyal medyanın meme büyütme ameliyatı geçirme kararı üzerindeki etkisine kesinlikle katıldı. Hastaların 33'ü sosyal medyanın ameliyat olma isteği üzerindeki etkisini artırdığını doğruladı. Cerrah seçmede pozitif etkinlik açısından hastaların %94'ü kesinlikle katıldı veya katıldı.

Sonuç: Karar verme sürecinde sosyal medya çeşitli faydalı bilgiler sunar. Sosyal medya, hastalar ve sağlık çalışanları arasında sağlıklı iletişim kurmada çok önemlidir.

Anahtar kelimeler: Meme büyütme, sosyal medya, Instagram, karar verme.

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Introduction

Social media platforms (Facebook, Instagram, Twitter, and TikTok) have become indispensable in daily life, communication, information dissemination, and social interaction. The frequency of social media use has increased, with an average daily usage of 143 min [1]. Among its users, the vast majority of individuals are aged 18-29, according to a report by the Pew Research Center [2].

Social media also serves as a powerful tool for the dissemination of cosmetic and aesthetic medicine knowledge on procedures, as well as facilitating decision-making and interaction with other patients [3, 4]. The use of social media is not limited to individuals; national and international plastic surgery organizations also take advantage of social media. Marketing and patient education are the primary reasons plastic surgeons use social media [5].

Among surgical procedures, breast augmentation is the second most popular surgical procedure (1,892,777 cases), according to The International Society of Aesthetic Plastic Surgery (ISAPS) survey on cosmetic and aesthetic procedures [6]. The influence of social media on breast augmentation surgery is a multifaceted topic. However, at present, studies highlighting the various aspects of this relationship are limited. Platforms such as Instagram, Snapchat, and TikTok have been found to significantly affect young women's desire and decision-making regarding cosmetic procedures [7, 8]. Individual anatomical differences, the variety of implant shapes and sizes, and patient expectations all represent barriers to decision-making.

This study aimed to assess the influence of social media on desire and decision-making with regard to breast augmentation procedures in Turkish female patients given the wide usage rates of social media in Türkiye [9].

Materials and methods

A total of 79 female participants who underwent breast augmentation surgery were included in this study. All patients underwent breast augmentation with silicone gel implants by the senior author. Patients who applied between February 2023 and August 2024 were enrolled.

The inclusion criteria included (i) having an active social media account on Instagram (ii) completing the survey. A 7-question survey was conducted to evaluate the effects of social media on the desire to undergo surgery and the decision to undergo surgery (Table 1). Each parameter was evaluated on the following scale: 1 = strongly disagree; 2 = disagree; 3 = neither agree nor disagree; 4 = agree; 5 = strongly agree. The questionnaire was administered via an online survey website (SurveyMonkey).

Patient age, occupation, average daily social media usage time, and history of cosmetic or aesthetic surgery were also assessed. Patients were divided into three age groups: (i) 20-24 years old; (ii) 25-29 years old; (iii) 30-47 years old.

This study was approved by the Health Sciences University Basaksehir Cam and Sakura City Hospital Local Ethics Committee (approved date: September 2, 2024 and approved number: E-96317027-514.10-252606133) and designed in accordance with the Declaration of Helsinki. Informed consent was obtained from all participants.

Table 1. Patient evaluation questionnaire

1	Do you think the decision-making process for breast augmentation surgery is difficult?
2	Do you think social media has an impact on your decision to have surgery?
3	Do you think social media increases or influences your desire to have surgery?
4	Do you think social media is effective in choosing a doctor?
5	Do you think informational videos on social media are helpful in making decisions?
6	Do you think before-and-after photos on social media are helpful in making a decision?
7	Do you think that face-to-face consultation with a doctor is more effective in the decision-making phase?

Statistical analysis

Data were analyzed using SPSS version 26.0 (IBM, NY, USA). Descriptive statistics were applied to patient evaluation questionnaire parameters. The chi-squared test was performed to compare age groups with social media usage duration and previous surgery history. Significance was set at $p < 0.05$.

Results

All patients responded to all questions. The mean age of the participants was 28.8 years (range: 20-47 years). A total of 72.15%

of patients had previously undergone a different type of plastic surgery, whereas 27.85% had not.

Regarding employment status, 61 participants were employed, 10 were unemployed, and eight were students. In terms of daily social media usage, 51.9% of patients spent more than two hours on social media per day. However, the most frequent time spent was 1-2 hours (28 patients). The duration of social media use is shown in Figure 1.

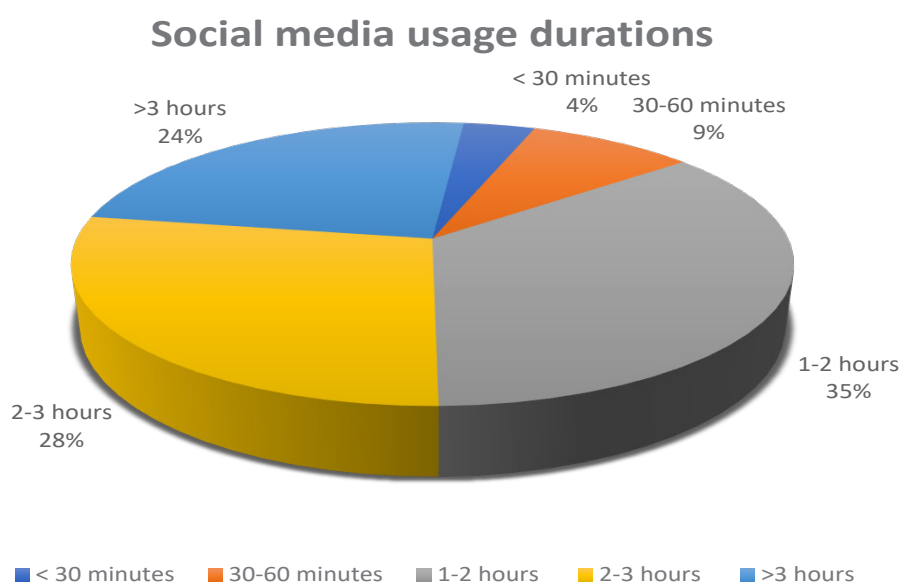


Figure 1. Social medial usage durations

Patient evaluation questionnaire

Participants responded to all survey questions. According to the questionnaire findings, the majority of patients (31/79, 39%) strongly agreed on the impact of social media on breast augmentation. However, only 15 patients strongly disagreed. In contrast, 94% of the patients strongly agreed or agreed with the effectiveness of social media in choosing a surgeon.

Moreover, 33 patients stated that social media amplified their desire to undergo surgery. In contrast, 11 patients either strongly disagreed or disagreed with this statement.

Remarkably, both informative videos and photographs taken before and after surgery had significant beneficial effects on decision-making. Among the patients, 76 (96%) strongly agreed or agreed on benefiting from photographs before and after the procedure, while 71 (89%) agreed on benefiting from informative videos.

In terms of positive effectiveness in choosing a surgeon, 94% of the patients strongly agreed or agreed. However, the vast majority of patients strongly agreed (65/79, 82.28%) that face-to-face consultations were significantly more valuable than social media in the final decision-making process. Detailed findings from the patient evaluation questionnaire are presented in Table 2.

Table 2. Descriptive results of the patient evaluation questionnaire

		Strongly Disagree	Disagree	Neither Agree/ Disagree	Agree	Strongly Agree
1	Do you think the decision-making process for breast augmentation surgery is difficult?	5	24	15	23	12
2	Do you think social media has an impact on your decision to have surgery?	4	11	9	24	31
3	Do you think social media increases or influences your desire to have surgery?	3	8	13	33	22
4	Do you think social media is effective in choosing a doctor?	0	2	2	30	45
5	Do you think informational videos on social media are helpful in making decisions?	0	2	6	36	35
6	Do you think before-and-after photos on social media are helpful in making a decision?	0	2	1	23	53
7	Do you think that face-to-face consultation with a doctor is more effective in the decision-making phase?	3	3	0	8	65

Age groups were compared based on surgical history and duration of social media usage (Table 3). Patients aged 30-47 years old showed more time on social media than those in other age groups. Most patients in this group (67.7%) spent two or more hours on social media. In addition, 80.6% of patients

had a history of cosmetic surgery in the 30-47 years old group. When a significance test was administered to reveal differences between age groups in terms of the duration of social media usage and previous surgery history, no significant differences were found ($p=0.068$ and $p=0.391$, respectively).

Table 3. Social media usage duration and previous surgery history among patient age groups

Age Groups	Previous cosmetic procedure		Social media usage durations	
	Yes	No	<2 hours	≥2 hours
20-24 years old (n:22)	15 (68.2%)	7 (31.8%)	12 (54.5%)	10 (45.5%)
25-29 years old (n:26)	17 (65.4%)	9 (34.6%)	16 (61.5%)	10 (38.5%)
30-47 years old (n:31)	25 (80.6%)	6 (19.4%)	10 (32.3%)	21 (67.7%)
Comprasion of age groups	P Value			
	0.391 (cs=1.878)		0.068 (cs=5.363)	

cs= Chi-Square test, The Significance level $p<0.05$

Discussion

Achieving a more attractive appearance is a common objective for women [10]. A review conducted by Linardon et al. [11] found that favorable body features are positively associated

with overall individual well-being, including self-esteem, self-compassion, and psychological stability. In this context, breast augmentation has been associated with significant improvements in women's body satisfaction and self-esteem [12].

In a study by Montañés Muro et al. [13], women with breast cancer had lower self-esteem, a negative body image and diminished sexual performance and satisfaction compared with women who had healthy breasts. The augmentation of breasts using implants was found to be the most efficient and common aesthetic procedure to achieve a more attractive appearance.

Although breast augmentation is one of the most frequently performed aesthetic procedures, the decision-making process for patients undergoing surgery can be difficult. In our study, up to 43% of the patients reported experiencing difficulties in their decision-making process. According to the literature, failure to meet patient expectations is an important reason for surgical dissatisfaction and fear [14]. Tools that help patients predict surgical results to facilitate a shared discussion with health professionals about these expectations have also been assessed and recommended in several studies [15, 16].

Importantly, with the increasing use of social media in cosmetic and aesthetic medicine, individuals are increasingly looking for information regarding procedures that allows them to form expectations based on the results of these procedures and facilitates decision-making. In addition, the majority of surgeons have professional social media accounts that they use to post photos and videos. As a result, the interaction between individuals considering surgery and health professionals via social media is noteworthy [17, 18].

A review conducted by Shauly et al. [19] found that social media helps patients choose plastic surgeons who are better able to meet their expectations, get into contact with surgeons, and obtain information in advance of consultations. In another study, 52.5% of surgeons pointed out that social media affects their consultations [20]. In the present study, 75 of the 78 patients agreed on the importance and benefits of social media when choosing a surgeon ($p<0.05$). In addition, the results also highlighted the efficiency of social media in regard to the selection of surgeons able to meet the expectations of their patients post-surgery.

Content diversity is one of the most important features of social media. Posts of before-and-

after photos and informative videos are among the most helpful types of content for prospective patients during their decision-making process. In a study conducted by Sorice et al. [21], the types of posts most desired by patients were investigated. They found that patients were most interested in before-and-after photos and practical information. Another study evaluated user engagement and content types in surgeons' social media accounts and found that the engagement levels were highest for educational content, with no significant differences observed between informative videos and before-and-after photos [22].

In the present study, 89-96% of patients agreed that informative videos and photographs were beneficial for decision-making ($p<0.05$). This result is consistent with the findings reported in the literature. Among previous studies, Montemurro found that 88.9% of patients specifically searched for photographs before making a decision [20].

However, the use of visual manipulation tactics in the before and after photos of aesthetic operations, including changing the background, angle, and lighting, can skew the perceptions of prospective patients on social media platforms like Instagram [23]. Therefore, there is a need for individuals to understand these limitations and make efforts to seek accurate information on the results of their procedures of interest.

Although social media platforms facilitate various types of information regarding surgical decision-making, face-to-face consultations were found to be key in the final decision-making phase. In the present study, while patients agreed that social media was an effective tool for selecting a surgeon (94.5%), they strongly agreed on the importance of face-to-face consultations rather than social media in their final decision-making step (92.4% versus 7.6%).

Montemurro et al. [24] suggested that although social media provides important and abundant information, face-to-face consultations remain the most important part of the decision-making process and are irreplaceable in terms of their ability to provide individuals with detailed patient-based information, explanations of the risks involved in different procedures, and a clear understanding of expectations. In fact,

Elmer et al. [25] investigated the most important factors in choosing a plastic surgeon and found that social media and television appearances were the least important.

Importantly, social media has been found to increase interest in and the degree of perceived necessity for breast surgery. Seetan et al. [26] investigated the influence of social media in 1629 participants who underwent cosmetic procedures compared with 1084 control participants and found that participants who underwent cosmetic interventions tended to use social media more. In addition, in a review by Rahman et al. [10], the intensified effect of social media on aesthetic decision-making was demonstrated. An increased inclination toward aesthetic interventions and changes in self-perception have also been attributed to increased social media usage.

In 2021, Di Gesto et al. [27] assessed the effects of social media use on body dissatisfaction and the tendency to compare their appearance to others among Italian women. The findings revealed that the act of following celebrities on social media was associated with significantly increased rates of acceptance of cosmetic surgery. Consistent with the literature, in the present study, 69% of patients displayed an increasing interest in breast surgery as a result of social media use. In a previous study, Wallner et al. [28] found that increasing social media usage was associated with a tendency to undergo aesthetic surgery.

This study had two main limitations. First, the size of the study cohort was relatively small. The enrollment of a larger patient sample may provide stronger and more valuable data. Second, Instagram was targeted as the primary social media platform. Expanding and comparing other social media platforms, such as YouTube and TikTok, may provide further information to facilitate a better understanding.

In conclusion, social media provides various types of information to assist prospective patients in their decision-making process regarding cosmetic and aesthetic procedures. Noticeably, both videos and before-and-after photos had beneficial effects on patients' decision to undergo surgery, as well as on their choice of surgeon. Particularly in the context of increasingly elevated rates of social media usage, social media has become an

important tool for establishing communication between patients and healthcare professionals. Therefore, the effective and appropriate use of social media platforms is important, with ethics playing an important role in the formation of patient expectations and the delivery of realistic surgical outcomes.

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Authors contributions: D.O. constructed the main idea and hypothesis of the study. D.O. and K.P. actively participated in writing, designing, and review of this study.

Conflict of interest: The authors declare that they have no conflicts of interest.

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