

The Use of Social Media and Its Influence on Undergoing Rhinoplasty

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Introduction: Rhinoplasty is one of the most frequently performed procedures, and such treatments are becoming more common. Social media platforms are crucial in the promotion of cosmetic surgery. Hence, this study aimed to assess social media use and influence on the decision to undergo rhinoplasty among Saudi patients.

Methods: This cross-sectional study was conducted by distributing a self-administered, online questionnaire among Saudi patients who had previously undergone rhinoplasty in a private practice in Riyadh, Saudi Arabia.

Results: A total of 205 participants were included, with the majority aged 26–35 years (54.1%). Most of them were female (91.2%). The most used social media platform was Snapchat (73.7%). The most reported factors that influenced the participants' decision to undergo rhinoplasty included before and after pictures on social media platforms (76.1%). Women were more frequently influenced by the before and after photographs on social media platforms ($P = 0.001$). More than half of respondents (52.7%) declared that their decisions were influenced by advertisements on social media platforms.

Conclusions: The use of social media influenced patients' decisions to undergo rhinoplasty, with Snapchat being the most used. The authenticity of the information offered on social media profiles maintained by doctors and nonphysicians is critical in deciding whether or not to undergo rhinoplasty. (*Plast Reconstr Surg Glob Open* 2022;10:e4375; doi: [10.1097/GOX.0000000000004375](https://doi.org/10.1097/GOX.0000000000004375); Published online 29 June 2022.)

INTRODUCTION

Rhinoplasty is one of the most common cosmetic procedures performed globally.¹ According to the American Society of Aesthetic Plastic Surgery, over 17.7 million cosmetic treatments were conducted, with rhinoplasty

surgeries accounting for 352,555, making it the top cosmetic procedure performed.² Botox was the most prevalent cosmetic surgery in Saudi Arabia (41%), whereas rhinoplasty was the most common facial plastic surgery procedure (59%).³ In this context, a total of 64% of individuals who had rhinoplasty between 2015 and 2020 were affected by social media, which, like celebrities, has been shown to have a significant impact on surgical procedure participation. Interestingly, men made up 58% of those impacted by social media sites.⁴ Social media usage may contribute to beauty concerns and, consequently, to appearance-altering practices such as cosmetic surgery.⁵ According to various surveys done in the United Kingdom, in 2017, roughly 55% of facial plastic surgeons stated that patients in their cosmetic practice were motivated by a desire to appear better in selfies, compared with 13% in 2016.⁶ According to Furnham and Levitas,⁷ increasing media exposure, poor self-esteem, and life satisfaction increase the likelihood of undergoing cosmetic surgery. Similarly, a study found that 65.7% of patients who attended Saudi Arabian

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Received for publication March 12, 2022; accepted April 27, 2022.

The authors declare that it conforms to the Declaration of Helsinki. The study was conducted under approval from Imam Mohammed Ibn Saud Islamic University Institutional Review Board. Before participation in the research, informed consent was gained from all participants.

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DOI: [10.1097/GOX.0000000000004375](https://doi.org/10.1097/GOX.0000000000004375)

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

Related Digital Media are available in the full-text version of the article on www.PRSGlobalOpen.com.

plastic surgery centers were motivated by cosmetic surgery outcomes before and after photographs uploaded on aesthetic surgeons' social media accounts.⁶ Another study done in Saudi Arabia found that social media influencers and celebrities had a 72.2% impact on the popularity of numerous facial cosmetic surgeries.⁸ As a result, many surgeons utilize social media to raise public awareness and interact with colleagues, recruit new patients, and establish careers and reputations.⁹ According to Montemurro et al,¹⁰ 91.4% of patients who underwent breast augmentation utilized online websites to obtain information, including social media and websites, and two-thirds used them as their primary source of information. As the growth of elective cosmetic procedures continues to rise, and little study has been undertaken to show the extent to which rhinoplasty advertisements have influenced individuals' desire to undergo cosmetic surgery, it is critical to investigate the media's impact and how it encourages patients on undergoing cosmetic surgery. Hence, this study aimed to assess social media use and influence on the decision to undergo rhinoplasty among Saudi patients. This information will allow facial plastic surgeons to effectively educate and convey appropriate content to patients considering rhinoplasty and target the age group most likely to undergo this surgery.

METHODS AND MATERIALS

After institutional review board approval, this cross-sectional study was conducted among patients who underwent rhinoplasty in a private practice in Riyadh, Saudi Arabia. This investigation adhered to the ethical principles mentioned in the Declaration of Helsinki. Our inclusion criteria included all adult patients (18 years or older), male and female, who had rhinoplasty surgery between 2018 and 2022. The data collection took place between January 15, 2022, and February 15, 2022. Two hundred forty-five patients were contacted. Of those, 205 patients responded. The patients were approached through a WhatsApp broadcast message that included the research question, rationale, and objectives. In addition to the online questionnaire and the reassurance of information anonymity, the questionnaire used consists of 24 questions, which the authors structured in the light of available literature with similar aims and objectives.^{4,8,11} The survey was revised by two expert consultants in the field of plastic surgery to ensure its objectivity. The questionnaire had two domains. In the first domain, all the included participants provided their demographic information, including age, gender, educational level, marital status, financial income, occupation, region of residence, and any children. The second domain was questions about their use of social media and its influence on their rhinoplasty decisions. (See figure, Supplemental Digital Content 1, which shows the questionnaire used, <http://links.lww.com/PRSGO/C56>.) The participants were given written consent to participate in the research. They were guaranteed that their data would be kept confidential. Statistical analysis was carried out using the Statistical Package for the Social Sciences (IBM Corp. Released 2019. IBM SPSS

Takeaways

Question: What factors influence the decision to undergo rhinoplasty among Saudi patients?

Findings: This cross-sectional study shows that the most influential factor in undergoing rhinoplasty was the before and after photographs on social media platforms, with Snapchat being the most commonly used platform.

Meaning: Patients largely influenced their decision to undergo rhinoplasty by before and after photographs and advertisements on social media platforms.

Statistics for Windows, Version 26.0.; IBM Corp, Armonk, N.Y.). Data were described as frequencies and percentages (categorical data). The association between demographic variables and selected variables was assessed using the Chi-squared test or Fisher exact test as appropriate. Statistical significance was deemed at a *P* value less than 0.05.

RESULTS

Characteristics of the Participants and Their Attitudes toward Plastic Surgery

A total of 205 participants provided valid responses on the online platform, with an overall response rate of 83.67%. More than half of the respondents aged 26–35 years (54.1%) and were single (54.1%) and employed (61.5%). The majority of them were women (91.2%), had a bachelor's degree (80.5%), and were residing in the central region (71.7%). More details about the demographic characteristics are provided in Table 1. The majority of the participants (44.9%) indicated that they would undergo a plastic surgery in the future. Regarding self-perceptions, 94.6% of the respondents underwent rhinoplasty to enhance their personal facial appearance, whereas the remainder (5.4%) knew about cosmetic surgeries when a friend or relative had undergone a surgical procedure.

Patterns of Social Media Usage

Almost two-thirds of the participants indicated that they usually take 1–5 selfies per day (67.8%), whereas 26.3% of them did not take selfies. The most commonly used social media platform among patients who underwent a rhinoplasty surgery was Snapchat (73.7%) followed by Instagram (12.7%). We further investigated the demographic differences in the patterns of Snapchat and Instagram use (Table 2). Results revealed that Snapchat use differed significantly based on the participants' occupational status (*P* = 0.028). In addition, Instagram use was more frequent in the northern region (*P* < 0.0001) and among participants with a high monthly income (*P* = 0.025) compared to other respective categories.

The Drivers of Undergoing Rhinoplasty

The most commonly reported factors that influenced the participants' decision to undergo rhinoplasty included before and after pictures on social media platforms (76.1%) and the desire to appear better in pictures

Table 1. Demographic Characteristics of Participants (n = 205)

Parameter	Category	Frequency	Percentage
Age, y	18–25	61	29.8
	26–35	111	54.1
	>35	33	16.1
Gender	Male	18	8.8
	Female	187	91.2
Relationship status	Single	111	54.1
	Married	78	38.0
	Divorced	14	6.8
	Widowed	2	1.0
Educational level	Below high school	0	0.0
	High school	28	13.7
	Bachelor's degree	165	80.5
	Master's degree	12	5.9
Occupation	Doctorate degree	0	0.0
	Student	24	11.7
	Employee	126	61.5
	Unemployed	48	23.4
	Other	7	3.4
Do you have children?	No	139	67.8
	Yes	66	32.2
Region of residence	Central	147	71.7
	Western	6	2.9
	Eastern	22	10.7
	Northern	24	11.7
	Southern	6	2.9
Household income	<5000 SR	44	21.5
	5000–10,000 SR	79	38.5
	>10,000–20,000 SR	50	24.4
	>20,000 SR	32	15.6

and selfies (73.2%, Fig. 1). We sought to investigate the demographic determinants of these two common variables. Results showed that women were more frequently influenced by the before and after photographs on social media platforms ($P = 0.001$), whereas participants with a bachelor's degree were more likely to be influenced by

the desire to appear better in photographs ($P = 0.001$; Table 3).

Participants' Perceptions and Social Media Advertisements

Interestingly, 108 respondents (52.7%) declared that their decisions were influenced by the cosmetic intervention advertisements on social media platforms (Fig. 1). The influence of social media ads differed significantly based on the respondents' relationship status ($P = 0.001$) and monthly household income ($P = 0.011$; Table 4). Among the participants who were influenced by the ads ($n = 108$), social media ads affected the perceptions regarding surgical interventions among 14.8% of respondents, nonsurgical interventions among 20.4% and both surgical and nonsurgical interventions among 64.8%. These ads appeared mostly on Instagram (65.4%) and Snapchat (30.7%). More than half of the participants (60.0%) stressed that they find news articles regarding rhinoplasty weekly or daily (Table 5). Regarding the most common social media platforms used to receive information about rhinoplasty, Instagram was the most common ($n = 134$, 65%; Fig. 2).

DISCUSSION

The American and British Associations for Plastic Surgery have raised significant concerns about the nature of cosmetic surgery in media coverage. Cosmetic surgery has been becoming more widespread in recent years, with more significant numbers of adolescents and adults being impacted by considering plastic surgery.^{9,10} Hence, this study aimed to assess social media use and influence on the decision to undergo rhinoplasty among Saudi

Table 2. Factors Associated with the Use of Two Common Platforms in Saudi Arabia, Including Snapchat and Instagram

Parameter	Category	Snapchat Use		P	Instagram Use		P
		No	Yes		No	Yes	
Age, y	18–25	22 (40.7)	39 (25.8)	0.119	49 (27.4)	12 (46.2)	0.146
	26–35	25 (46.3)	86 (57.0)		100 (55.9)	11 (42.3)	
	>35	7 (13.0)	26 (17.2)		30 (16.8)	3 (11.5)	
Gender	Male	6 (11.1)	12 (7.9)	0.481	18 (10.1)	0 (0.0)	0.090
	Female	48 (88.9)	139 (92.1)		161 (89.9)	26 (100.0)	
Relationship status	Single	33 (61.1)	78 (51.7)	0.524	95 (53.1)	16 (61.5)	0.453
	Married	17 (31.5)	61 (40.4)		68 (38.0)	10 (38.5)	
	Divorced	4 (7.4)	10 (6.6)		14 (7.8)	0 (0.0)	
	Widowed	0 (0.0)	2 (1.3)		2 (1.1)	0 (0.0)	
Educational level	Below high school	0 (0.0)	0 (0.0)	0.075	0 (0.0)	0 (0.0)	0.088
	High school	12 (22.2)	16 (10.6)		21 (11.7)	7 (26.9)	
	Bachelor's degree	38 (70.4)	127 (84.1)		148 (82.7)	17 (65.4)	
	Master's degree	4 (7.4)	8 (5.3)		10 (5.6)	2 (7.7)	
	Doctorate degree	0 (0.0)	0 (0.0)		0 (0.0)	0 (0.0)	
Occupation	Student	11 (20.4)	13 (8.6)	0.028	22 (12.3)	2 (7.7)	0.512
	Employee	33 (61.1)	93 (61.6)		107 (59.8)	19 (73.1)	
	Unemployed	7 (13.0)	41 (27.2)		43 (24.0)	5 (19.2)	
	Other	3 (5.6)	4 (2.6)		7 (3.9)	0 (0.0)	
Do you have children?	No	35 (64.8)	104 (68.9)	0.584	121 (67.6)	18 (69.2)	0.868
	Yes	19 (35.2)	47 (31.1)		58 (32.4)	8 (30.8)	
Region of residence	Central	34 (63.0)	113 (74.8)	0.130	135 (75.4)	12 (46.2)	<0.0001
	Western	0 (0.0)	6 (4.0)		6 (3.4)	0 (0.0)	
	Eastern	8 (14.8)	14 (9.3)		20 (11.2)	2 (7.7)	
	Northern	10 (18.5)	14 (9.3)		14 (7.8)	10 (38.5)	
	Southern	2 (3.7)	4 (2.6)		4 (2.2)	2 (7.7)	
Household income	<5000 SR	10 (18.5)	34 (22.5)	0.216	44 (24.6)	0 (0.0)	0.025
	5000–10k SR	23 (42.6)	56 (37.1)		67 (37.4)	12 (46.2)	
	>10,000–20,000 SR	9 (16.7)	41 (27.2)		43 (24.0)	7 (26.9)	
	>20,000 SR	12 (22.2)	20 (13.2)		25 (14.0)	7 (26.9)	

Values in boldface indicate $P < 0.05$.

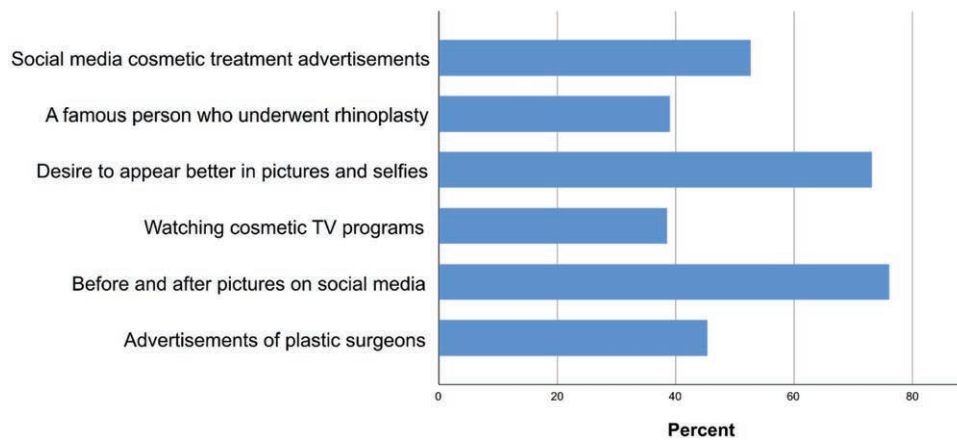


Fig. 1. The percentages of participants' responses regarding the influence of selected variables on their perceptions regarding undergoing rhinoplasty.

patients. To the authors' knowledge, this is one of the first studies in the literature to determine the effect of social media on the decision to undergo rhinoplasty. This investigation was conducted among 205 participants who filled out a questionnaire on an online survey. The main findings were that most of the participants indicated they would undergo further cosmetic surgeries in the future. The influential factors for undergoing rhinoplasty are the before and after pictures on social media platforms, which impacted 76.1% of the patients, followed by the desire to appear better in selfies and pictures. About two-thirds of the patients mentioned that they take about 1–5 selfies per

day. Moreover, more than half of the patients declared that their decision was influenced by cosmetic intervention advertisements on social media platforms. These findings partly supported the theory that aesthetic enhancement pictures (contrasted with a control condition) induce the desire for cosmetic surgery. In addition, Snapchat (73.7%) was the most commonly used social media platform among patients who underwent rhinoplasty, followed by Instagram (12.7%). This could be explained by the fact that Snapchat may provide Saudi citizens a sense of safety that they do not get from more popular platforms like Tiktok, Facebook, or Twitter. Snapchat has the

Table 3. Demographic Determinants of the Most Common Factors that Influence Participants' Decision Regarding Undergoing Rhinoplasty

Parameter	Category	Before and after Pictures on Social Media			Desire to Appear Better in Pictures and Selfies		
		No	Yes	<i>P</i>	No	Yes	<i>P</i>
Age, y	18–25	19 (38.8)	42 (26.9)	0.117	24 (43.6)	37 (24.7)	0.031
	26–35	26 (53.1)	85 (54.5)		24 (43.6)	87 (58.0)	
	>35	4 (8.2)	29 (18.6)		7 (12.7)	26 (17.3)	
Gender	Male	10 (20.4)	8 (5.1)	0.001	5 (9.1)	13 (8.7)	0.924
	Female	39 (79.6)	148 (94.9)		50 (90.9)	137 (91.3)	
Relationship Status	Single	33 (67.3)	78 (50.0)	0.177	31 (56.4)	80 (53.3)	0.573
	Married	14 (28.6)	64 (41.0)		22 (40.0)	56 (37.3)	
	Divorced	2 (4.1)	12 (7.7)		2 (3.6)	12 (8.0)	
	Widowed	0 (0.0)	2 (1.3)		0 (0.0)	2 (1.3)	
Educational level	Below high school	0 (0.0)	0 (0.0)	0.064	0 (0.0)	0 (0.0)	0.001
	High school	8 (16.3)	20 (12.8)		11 (20.0)	17 (11.3)	
	Bachelor's degree	35 (71.4)	130 (83.3)		36 (65.5)	129 (86.0)	
	Master's degree	6 (12.2)	6 (3.8)		8 (14.5)	4 (2.7)	
Occupation	Doctorate degree	0 (0.0)	0 (0.0)	0.143	0 (0.0)	0 (0.0)	0.284
	Student	10 (20.4)	14 (9.0)		7 (12.7)	17 (11.3)	
	Employee	25 (51.0)	101 (64.7)		32 (58.2)	94 (62.7)	
	Unemployed	12 (24.5)	36 (23.1)		16 (29.1)	32 (21.3)	
Do you have children?	Other	2 (4.1)	5 (3.2)	0.534	0 (0.0)	7 (4.7)	0.148
	No	35 (71.4)	104 (66.7)		33 (60.0)	106 (70.7)	
Region of residence	Yes	14 (28.6)	52 (33.3)	0.122	22 (40.0)	44 (29.3)	0.407
	Central	31 (63.3)	116 (74.4)		44 (80.0)	103 (68.7)	
	Western	2 (4.1)	4 (2.6)		2 (3.6)	4 (2.7)	
	Eastern	6 (12.2)	16 (10.3)		4 (7.3)	18 (12.0)	
	Northern	10 (20.4)	14 (9.0)		5 (9.1)	19 (12.7)	
Household Income	Southern	0 (0.0)	6 (3.8)	0.071	0 (0.0)	6 (4.0)	0.170
	<5000 SR	4 (8.2)	40 (25.6)		11 (20.0)	33 (22.0)	
	5000–10,000 SR	21 (42.9)	58 (37.2)		16 (29.1)	63 (42.0)	
	>10,000–20,000 SR	14 (28.6)	36 (23.1)		19 (34.5)	31 (20.7)	
	>20,000 SR	10 (20.4)	22 (14.1)		9 (16.4)	23 (15.3)	

Values in boldface indicate $P < 0.05$.

Table 4. Factors Associated with the Influence of Social Media Cosmetic Treatment Advertisements on Participants' Perceptions Regarding Undergoing Rhinoplasty

Parameter	Category	Social Media Cosmetic Treatment Advertisements		P
		No	Yes	
Age, y	18–25	34 (35.1)	27 (25.0)	0.173
	26–35	46 (47.4)	65 (60.2)	
	>35	17 (17.5)	16 (14.8)	
Gender	Male	10 (10.3)	8 (7.4)	0.464
	Female	87 (89.7)	100 (92.6)	
Relationship status	Single	57 (58.8)	54 (50.0)	0.001
	Married	40 (41.2)	38 (35.2)	
	Divorced	0 (0.0)	14 (13.0)	
	Widowed	0 (0.0)	2 (1.9)	
Educational level	Below high school	0 (0.0)	0 (0.0)	0.358
	High school	12 (12.4)	16 (14.8)	
	Bachelor's degree	77 (79.4)	88 (81.5)	
	Master's degree	8 (8.2)	4 (3.7)	
Occupation	Doctorate degree	0 (0.0)	0 (0.0)	0.523
	Student	14 (14.4)	10 (9.3)	
	Employee	58 (59.8)	68 (63.0)	
	Unemployed	23 (23.7)	25 (23.1)	
	Other	2 (2.1)	5 (4.6)	
Do you have children?	No	69 (71.1)	70 (64.8)	0.334
Region of residence	Yes	28 (28.9)	38 (35.2)	0.084
	Central	72 (74.2)	75 (69.4)	
Household income	Western	4 (4.1)	2 (1.9)	0.011
	Eastern	8 (8.2)	14 (13.0)	
	Northern	13 (13.4)	11 (10.2)	
	Southern	0 (0.0)	6 (5.6)	
	<5000 SR	13 (13.4)	31 (28.7)	
5000–10,000 SR	35 (36.1)	44 (40.7)		
>10,000–20,000 SR	29 (29.9)	21 (19.4)		
>20,000 SR	20 (20.6)	12 (11.1)		

Values in boldface indicate $P < 0.05$.

feature of automatic deletion of opened pictures immediately and unopened ones within a month. In a study by Alghamdi and Qobty,⁴ a prestructured questionnaire distributed among patients who underwent rhinoplasty, Snapchat was the most popular social media platform (57%). It influenced more than two-thirds of their participants.⁴ Their findings align with ours, as Snapchat was the most commonly used social media platform (73.7%). Another study discussed similar topics but with a different

targeted population. As per Arab et al,⁸ more than 50% of the participants followed accounts of plastic surgeons. Likewise, most of our respondents (52.7%) declared that their decision to undergo rhinoplasty was influenced by the cosmetic intervention advertisements on social media platforms. This finding was also observed in a study by Park et al,⁹ which found that social media is an essential communication and marketing tool in the cosmetic field. Aldosari et al¹² conducted a cross-sectional study among 653 Saudi residents, and he found that the number of selfies and the filters being used are influential solid factors on the desire to seek cosmetic surgery in Saudi Arabia. This finding agrees with ours, as almost two-thirds of our respondents indicated that they usually take 1–5 selfies per day. This demonstrated their interest in rhinoplasty by the desire to appear better in pictures and selfies. In our investigation, a total of 76.1% of our participants found that their decision to undergo rhinoplasty was influenced by the before and after images on social media platforms, where women were more influenced than men ($P = 00.1$). In addition, respondents with a bachelor's degree were more influenced by the desire to appear better in photographs ($P = 00.1$). These findings were also observed in a study by Aldosari.⁶ Walker et al¹³ observed that photographs of women who had cosmetic surgery and uploaded their photographs on social media significantly impacted their followers' willingness to undergo cosmetic surgery. This is also consistent with a study of 100 patients conducted in the United States. Half of the patients preferred to view photographs before and after surgery rather than watch instructional films, testimonials, or practice material.¹⁴ Furthermore, we found that, except for cosmetics, the group of individuals aged 26 to 35 years was the most vulnerable to being impacted by all of the variables included in our research. This could be explained by the largest share of the social media advertising audience in Saudi Arabia being between 25 and 34 years old, at about 38.1% men and 16.6% women.¹⁵ Rhinoplasty demand has been increasing within the last few years, and aesthetic surgeons have used several methods for advertising, apart from the usual methods. One of the recent ways is using different social media platforms, available to and used by millions of people in Saudi Arabia and around the world. The present investigation adds tremendous value to the current literature with the largest sample size among

Table 5. Participants' Perceptions and Social Media Advertisements

Parameter	Category	Frequency	Percent (%)
For which type of cosmetic treatment did social media cosmetic treatment advertisements influence you?*	Surgical procedures	16	14.8
	Nonsurgical procedures	22	20.4
How often do you find news articles about rhinoplasty on social media?	Both	70	64.8
	Rarely	47	22.9
	Monthly	35	17.1
	Weekly	69	33.7
	Daily	54	26.3
Do you believe advertisements that present rhinoplasty as a safe surgical procedure?	No	85	41.5
	Yes	120	58.5
Have you ever brought a photograph of a person who had rhinoplasty performed to a doctor's clinic and asked for the same shape of nose?	No	159	77.6
	Yes	46	22.4

*The responses were provided for 108 participants who answered yes to the following question: Have social media cosmetic treatment advertisements influenced you to consider undergoing a rhinoplasty?

The social media platform you receive most information about rhinoplasty on

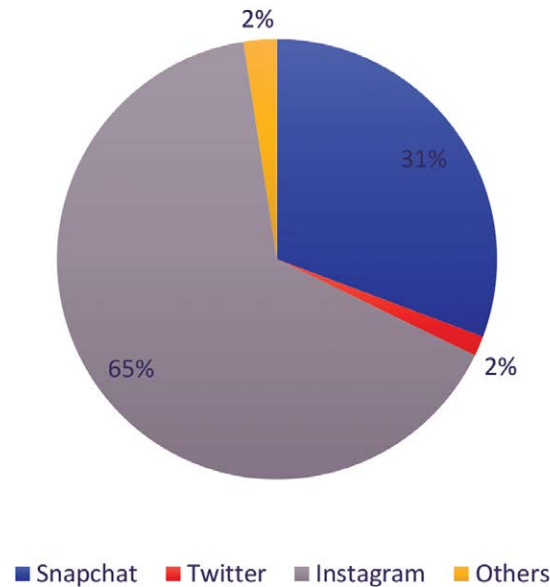


Fig. 2. The percentages of participants' responses regarding the most common social media platforms used to receive information about rhinoplasty.

rhinoplasty patients compared with previously published articles. More studies are needed to identify all of the elements that influence rhinoplasty decision-making and find any demographic-related tendencies.

Limitations and Future Recommendations

There are different limitations in our study that must be addressed—first, the descriptive cross-sectional nature of the study and the probability of bias. Second, our study only included single-surgeon procedures, conducted in a private practice. Further research projects are needed to include a larger pool of patients, which is recommended. The third limitation is that regional legislative diversity might represent a drawback to our study. Last, regarding the data collected, it was self-reported, which might introduce response bias due to the effects of social desirability or selective memory. However, the questionnaire incorporated several aspects of the desired subject, making it less likely that those biases affected the results. Despite the previously mentioned limitations, the authors believe that this study is of high value when assessing social media use and its influence on undergoing rhinoplasty. It also emphasizes the need to encourage patients to avoid being influenced by social media without knowing the implications and concentrate on the operation's primary goal, which is to address the patient's complaint only, rather than having unnecessary harmful procedures. The findings of this research may be utilized to underline the necessity of being aware of significant surgical complications and having a complete grasp of them before undergoing surgery. These findings might potentially be utilized as a framework for evaluating our approach to future rhinoplasty surgery patients to improve their outcomes and

satisfaction. More broadly, the impact of the before and after images on social media platforms on the degree of satisfaction, the influence of filters used on social networks on patients' expectations, and whether the expectations are consistent with the reality and the anatomical possibilities of the patient were not assessed. We believe these topics would be fruitful ideas for future work.

CONCLUSIONS

This study was determined to assess the use of social media and its influence on undergoing rhinoplasty among patients in Saudi Arabia. Our results found that respondents were mostly influenced in their decision to undergo rhinoplasty by seeing before and after pictures on social media platforms, and Snapchat was the most commonly used social media platform among rhinoplasty patients in Saudi Arabia. Finally, we recommend that surgeons build professional and scientific social media profiles to give full and accurate information regarding cosmetic treatments.

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ACKNOWLEDGMENTS

We would like to thank Amani Abualnaja, Reemah Alqahtani, Lujain Alotaibi, and Othillah Moazin for helping in the data collection.

REFERENCES

1. Fichman M, Piedra Buena IT. Rhinoplasty. In: *StatPearls*. Treasure Island, FL: StatPearls Publishing; 2021.
2. American Society of Plastic Surgeons. 2018 Plastic Surgery Statistics Report; 2019. Available at: <https://www.plasticsurgery.org/Documents/News/Statistics/2018/Plastic-Surgery-Statistics-Full-Report-2018.Pdf>. Accessed March 2022.
3. Reham A. The reasons behind the trending of facial plastic surgery in Saudi Arabia. *Sch J Otolaryngol*. 2019;1:93–98.
4. Alghamdi W, Qobty A. Effect of social media on decision to undergo rhinoplasty. *Glob J Otolaryngol*. 2020;22:103–123.
5. De Vries DA, Peter J, Nikken P, de Graaf H. The effect of social network site use on appearance investment and desire for cosmetic surgery among adolescent boys and girls. *Sex Roles*. 2014;71:283–295.
6. Aldosari BF, Alkarzae M, Almuhaya R, et al. Effect of media on facial plastic surgery in Saudi Arabia. *Cureus*. 2019;11:e6232.
7. Furnham A, Levitas J. Factors that motivate people to undergo cosmetic surgery. *Can J Plast Surg*. 2012;20:e47–e50.
8. Arab K, Barasain O, Altaweel A, et al. Influence of social media on the decision to undergo a cosmetic procedure. *Plast Reconstr Surg Glob Open*. 2019;7:e2333.
9. Park SSE, Akella SS, Moon JY, et al. Building your brand: analysis of successful oculoplastic surgeons on social media. *Ophthalmic Plast Reconstr Surg*. 2020;36:582–589.
10. Montemurro P, Porcnik A, Hedén P, et al. The influence of social media and easily accessible online information on the aesthetic plastic surgery practice: literature review and our own experience. *Aesthetic Plast Surg*. 2015;39:270–277.
11. Alghonaim Y, Arafat A, Aldeghaither S, et al. Social media impact on aesthetic procedures among females in Riyadh, Saudi Arabia. *Cureus*. 2019;11:e6008.
12. Aldosari, B. Do filters and pose in selfies have an effect on cosmetic procedures. *Saudi J Otorhinolaryngol Head Neck Surgery*. 2020;22:21.
13. Walker CE, Krumhuber EG, Dayan S, Furnham A. Effects of social media use on desire for cosmetic surgery among young women. *Current Psychology*. 2021;40:3355–3364.
14. Sorice S, Li A, Gilstrap J, Canales F, Furnas H: Social media and the plastic surgery patient. *Plast Reconstr Surg*. 2017;140:1047–1056.
15. Saudi Arabia: social media ads audience share by age and gender 2020 | Statista. (2022). Available at <https://www.statista.com/statistics/1202831/saudi-arabia-social-media-ads-audience-share-by-age-and-gender/#:~:text=In%202020%2C%20the%20largest%20share,females%2C%20and%2038.1%20percent%20males>. Accessed March 11, 2022.