

# Perception and Attitude of College Students toward Cosmetic Rhinoplasty

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### Abstract

Introduction:

Rhinoplasty, a surgery that reshapes the nose to increase facial beauty or to restore the nasal function after a physical defect, is the most popular plastic surgery worldwide and second most common in Saudi Arabia. Regardless of how common this procedure is done in Saudi Arabia, there is a huge lack of studies on how medical students feels and acts towards it. Thus, this study aimed to assess the perception and attitude of cosmetic rhinoplasty among Fakeeh college students in Jeddah, Saudi Arabia.

### Materials and Methods:

A validated questionnaire about participants desire to rhinoplasty was randomly distributed among all Fakeeh College students in a simple random technique.

## Results:

306 participants completed the questionnaire Most responders (60.1%) were happy with their noses. A significant association was noted between gender and desire to undergo rhinoplasty (P=0.034). Also, there is a significant relationship between the participant's desire for rhinoplasty and its cost (P = 0.034).

## Conclusion:

This study showed although rhinoplasty is socially accepted in Saudi Arabia. there is a low desire in college students toward performing rhinoplasty. Factors like cost of surgery or gender affect people's willingness to do rhinoplasty.

## Keywords:

Medical students, Understanding, Surgical rhinoplasty, Situation, Saudi Arabia.

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#### Introduction

Rhinoplasty is the most popular type of plastic surgery that basically reshapes the nose to increase facial beauty or to restore the nasal function after a physical defect, such as birth disorders, trauma, burns, developmental abnormalities, infections, tumors, preference and self-choice (1,2).

Nose appearance and length can affect selfperception in both genders because the nose is located in the center of the face.

Thus, rhinoplasty is becoming more widely used (3). Rhinoplasty has complications which include as in any surgical procedure, which include complications in anesthesia, unsatisfactory appearance and deformity, septal perforation and hematoma, epistaxis, infection and worsening in nasal functions or in the shape rather than improvement (4,5).

Rhinoplasty is considered the fifth most commonly performed plastic surgery type and the second most common in Saudi Arabia (2).

Regardless of how common this procedure is done in Saudi Arabia, studies on how the population feels and acts toward it particularly medical students who are more exposed and knowledge regarding rhinoplasty, are lacking. Thus, this study aimed to assess the perception and attitude of cosmetic rhinoplasty among Fakeeh college students in Jeddah, Saudi Arabia.

#### Materials and Methods

This study was approved by the Fakeeh College for Medical Sciences (FCMS) committee. A cross sectional study was conducted randomly among Fakeeh College students in Jeddah, Saudi Arabia from.

Fakeeh students in all academic years of four departments (Medicine, MLS, Nursing, and Pharma D) were included, and an electronic self-administered questionnaire was distributed online from February to June 2022.

The sample size was 292, which was calculated by a Raosoft calculator.

In this study, we used an online questionnaire that was validated, and the following sections were included:

First section: - Demographic data: (Gender, age, discipline, academic year)

Second section: Attitude of the sample, which included 12 questions: The answers for each question are as follows: 1. Feeling about Your nose? Happy, Not happy, Do not care.

2. Any previous cosmetic rhinoplasty? Yes, No.

3. Are rhinoplasty necessary? Yes, No, Not sure.4. Any family history of cosmetic intervention? Yes, No.

5. Has a friend undergone cosmetic surgery? Yes, No.

6. Are you embarrassed of cosmetic procedures if anybody noticed it? Yes, No.

 7. Would you undergo cosmetic procedures if your friend tell you to do so? Yes, No, Uncertain.
 8. If cosmetic surgeries were done for free, would you go for any cosmetic

surgery? Yes, No, Not sure.

9. If you were cognizant that somebody underwent cosmetic surgery, does this influence your relationship with him? Yes, No, Not sure.

10. Is It socially accepted in Jeddah? Yes, No, Not sure.

11. If (10) yes, to what extant is it acceptable? Widely, Averagely, Not acceptable.

Data collection technique: A validated questionnaire was randomly distributed among all Fakeeh College students using a simple random technique.

Data analysis: Data received from the online survey were entered into Microsoft Office Excel 2016 and analyzed using the Statistical Package for Social Sciences (SPSS) version 25. A Pvalue of<0.05 was considered significant.

### Results

Among the 306 student participants, (247 (80.7%)) were females and (59 (19.3%)) males. Most of the students (298 (97.4%)) were aged 18 - 25 years. Most of the students were Medicine (201 (65.7%)) (Table 1).

The percentage of students with a history of previous rhinoplasty was 10.8%.

Most of the students feel happy regarding their noses (184 (60.1%)). A total of (123 (40.2%)) chose no when we asked if rhinoplasty is necessary. Ninety-three (30.4%) had a family history of cosmetic intervention. Majority (199 (65.0%)) felt that rhinoplasty is socially accepted in Jeddah (Table 2).

200 Iranian Journal of Otorhinolaryngology, Vol. 35(4), Serial No. 129, Jul-2023

### Students Attitude towards Rhinoplasty

Charact	eristics	N (%)
Candan	Female	247 (80.7%)
Gender	Male	59 (19.3%)
	below 18	1 (0.3%)
Age groups	18-25	298 (97.4%)
	Above 25	7 (2.3%)
	Medicine	201 (65.7%)
Specialty	MLS	20 (6.5%)
	Nursing	59 (19.3%)
	Pharm D	26 (8.5%)
	1st year	15 (4.9%)
	2nd year	80 (26.1%)
Academic year	3rd year	92 (30.1%)
	4th year	52 (17.0%)
	5th year	40 (13.1%)
	6th year	27 (8.8%)

Table 1:	Demographic	characteristics	of respondents

Table 2: Attitudes of Fakeeh medica	al students towards	cosmetic rhinoplasty
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Question	Attitude	N (%)
XZ 6 1' 1'	Нарру	184 (60.1%)
Your feeling regarding your nose	Not happy	59 (19.3%)
	Don't care	63 (20.6%)
Any previous cosmetic rhinoplasty?	Yes	33 (10.8%)
	No	273 (89.2%)
	Yes	71 (23.2%)
Is rhinoplasty necessary?	No	123 (40.2%)
	Not sure	112 (36.6%)
Any family history of cosmetic intervention?	Yes	93 (30.4%)
	No	213 (69.6%)
Has a friend undergone cosmetic surgery?	Yes	126 (41.2%)
Has a mend undergone cosmetic surgery?	No	180 (58.8%)
Are you embarrassed of cosmetic procedures if	Yes	59 (19.3%)
anybody noticed it?	No	247 (80.7%)
Would you undergo cosmetic procedure if your friends tell you to do so?	Yes	151 (49.3%)
	No	64 (20.9%)
	Uncertain	91 (29.7%)
	Yes	106 (34.6%)
If cosmetic surgeries were done for free, would you go for any cosmetic surgery?	No	138 (45.1%)
go for any cosincite surgery.	Not sure	62 (20.3%)
If you were cognizant that somebody underwent	Yes	27 (8.8%)
cosmetic surgery, does this influences your	No	257 (84.0%)
relationship with him?	Not sure	22 (7.2%)
	Yes	199 (65.0%)
Is it socially accepted in Jeddah?	No	22 (7.2%)
	Not sure	85 (27.8%)
	Widely	88 (28.8%)
If (10) yes, to what extant is it acceptable?	Averagely	124 (40.5%)
	Not acceptable	94 (30.7%)

A significant association was noted regarding gender and undergoing cosmetic surgery affecting relationships with a P value = 0.029(Table 3). A significant association regarding specialty and undergoing cosmetic surgeries if performed for free, with a P value = 0.034 and if it is socially accepted to undergo rhinoplasty in Jeddah with a P value = 0.043 (Table 4).

Table 3: Attitudes of gender towards cosmetic rhinoplasty

Question	Response	Male	Female	Total	P-value	
			N (%)			
1. Your feeling regarding your nose	Нарру	35 (11.4%)	149 (48.7%)	184 (60.1%)		
	Not happy	9 (2.9%)	50 (16.3%)	59 (19.3%)	0.483	
	Don't care	15 (4.9%)	48 (15.7%)	63 (20.6%)		
2. Any previous cosmetic rhinoplasty?	Yes	8 (2.6%)	25 (8.2%)	33 (10.8%)		
2. Any previous cosinetic minoplasty:	No	51 (16.7%)	222 (72.5%)	273 (89.2%)	0.595	
	Yes	12 (3.9%)	59 (19.3%)	71 (23.2%)		
3. Is rhinoplasty necessary?	No	27 (8.8%)	96 (31.4%)	123 (40.2%)	0.616	
	Not sure	20 (6.5%)	92 (30.1%)	112 (36.6%)	0.010	
4. Any family history of cosmetic	Yes	17 (5.6%)	76 (24.8%)	93 (30.4%)		
intervention?	No	42 (13.7%)	171 (55.9%)	213 (69.6%)	0.891	
5. Has a friend undergone cosmetic surgery?	Yes	25 (8.2%)	101 (33.0%)	126 (41.2%)	0.951	
	No	34 (11.1%)	146 (47.7%)	180 (58.8%)		
6. Are you embarrassed of cosmetic procedures if anybody noticed it?	Yes	12 (3.9%)	47 (15.4%)	59 (19.3%)	0.963	
	No	47 (15.4%)	200 (65.4%)	247 (80.7%)		
7. Would you undergo cosmetic procedure if your friends tell you to do so?	Yes	24 (7.8%)	127 (41.5%)	151 (49.3%)		
	No	10 (3.3%)	54 (17.6%)	64 (20.9%)	0.061	
	Uncertain	25 (8.2%)	66 (21.6%)	91 (29.7%)		
8. If cosmetic surgeries were done for	Yes	16 (5.2%)	90 (29.4%)	106 (34.6%)		
free, would you go for any cosmetic surgery?	No	31 (10.1%)	107 (35.0%)	138 (45.1%)	0.351	
	Not sure	12 (3.9%)	50 (16.3%)	62 (20.3%)		
. If you were cognizant that somebody	Yes	8 (2.6%)	19 (6.2%)	27 (8.8%)		
underwent cosmetic surgery, does this nfluences your relationship with him?	No	43 (14.1%)	214 (69.9%)	257 (84.0%)	0.029*	
	Not sure	8 (2.6%)	14 (4.6%)	22 (7.2%)		
	Yes	33 (10.8%)	166 (54.2%)	199 (65.0%)	0.244	
10. Is it socially accepted in Jeddah?	No	6 (2.0%)	16 (5.2%)	22 (7.2%)		
	Not sure	20 (6.5%)	65 (21.2%)	85 (27.8%)		
11 If $(10)$ was to what extend in it	Widely	12 (3.9%)	76 (24.8%)	88 (28.8%)		
11. If (10) yes, to what extant is it acceptable?	Averagely	21 (6.9%)	103 (33.7%)	124 (40.5%)	0.039*	
	Not acceptable	26 (8.5%)	68 (22.2%)	94 (30.7%)		

202 Iranian Journal of Otorhinolaryngology, Vol. 35(4), Serial No. 129, Jul-2023

#### Students Attitude towards Rhinoplasty

**Table 4:** Attitudes based on specialty toward cosmetic rhinoplasty

Question	Response	MBBS	MLS	Nursing	Pharma D	P-value
		N (%)				
	Нарру	122 (39.9%)	11 (3.6%)	32 (10.5%)	19 (6.2%)	_
1. Your feeling regarding your nose	Not happy	42 (13.7%)	4 (1.3%)	10 (3.3%)	3 (1.0%)	0.499
	Don't care	37 (12.1%)	5 (1.6%)	17 (5.6%)	4 (1.3%)	0.499
2. Any previous cosmetic rhinoplasty?	Yes	17 (5.6%)	3 (1.0%)	10 (3.3%)	3 (1.0%)	0.278
	No	184 (60.1%)	17 (5.6%)	49 (16.0%)	23 (7.5%)	
	Yes	43 (14.1%)	7 (2.3%)	15 (4.9%)	6 (2.0%)	
3. Is rhinoplasty necessary?	No	89 (29.1%)	8 (2.6%)	17 (5.6%)	9 (2.9%)	0.207
	Not sure	69 (22.5%)	5 (1.6%)	27 (8.8%)	11 (3.6%)	0.307
4. Any family history of cosmetic	Yes	63 (20.6%)	6 (2.0%)	16 (5.2%)	8 (2.6%)	
intervention?	No	138 (45.1%)	14 (4.6%)	43 (14.1%)	18 (5.9%)	0.942
5. Has a friend undergone cosmetic	Yes	86 (28.1%)	9 (2.9%)	20 (6.5%)	11 (3.6%)	0.650
surgery?	No	115 (37.6%)	11 (3.6%)	39 (12.7%)	15 (4.9%)	0.650
6. Are you embarrassed of cosmetic	Yes	31 (10.1%)	7 (2.3%)	15 (4.9%)	6 (2.0%)	0.070
procedures if anybody noticed it?	No	170 (55.6%)	13 (4.2%)	44 (14.4%)	20 (6.5%)	0.079
7. Would you undergo cosmetic	Yes	109 (35.6%)	6 (2.0%)	26 (8.5%)	10 (3.3%)	
procedure if your friends tell you to do	No	38 (12.4%)	8 (2.6%)	13 (4.2%)	5 (1.6%)	0.139
so?	Uncertain	54 (17.6%)	6 (2.0%)	20 (6.5%)	11 (3.6%)	0.139
8. If cosmetic surgeries were done for	Yes	73 (23.9%)	7 (2.3%)	24 (7.8%)	2 (0.7%)	
free, would you go for any cosmetic	No	93 (30.4%)	9 (2.9%)	19 (6.2%)	17 (5.6%)	0.034*
surgery?	Not sure	35 (11.4%)	4 (1.3%)	16 (5.2%)	7 (2.3%)	0.054
9. If you were cognizant that somebody	Yes	14 (4.6%)	2 (0.7%)	7 (2.3%)	4 (1.3%)	
underwent cosmetic surgery, does this	No	173 (56.6%)	46 (15.0%)	46 (15.0%)	22 (7.2%)	0.430
influences your relationship with him?	Not sure	14 (4.6%)	6 (2.0%)	6 (2.0%)	0(0.0%)	01120
	Yes	141 (46.1%)	9 (2.9%)	35 (11.4%)	14 (4.6%)	
10. Is it socially accepted in Jeddah?	No	10 (3.3%)	1 (0.3%)	8 (2.6%)	3 (1.0%)	0.043*
	Not sure 50 (16	50 (16.3%)	10 (3.3%)	16 (5.2%)	9 (2.9%)	
	Widely	67 (21.9%)	3 (1.0%)	13 (4.2%)	5 (1.6%)	
11. If (10) yes, to what extant is it acceptable?	Averagely	76 (24.8%)	7 (2.3%)	31 (10.1%)	10 (3.3%)	
-	Not acceptable	58 (19.0%)	10 (3.3%)	15 (4.9%)	11 (3.6%)	0.074

#### Discussion

This study aimed to assess the perception and attitude of Fakeeh students towards cosmetic rhinoplasty.

The percentage of students whom practice rhinoplasty is (10.8%)according to the results and a similar result as that of our study was revealed at Al-Nahrain University (10.5%), (6) unlike a study performed at the Massachusetts General Hospital of USA. Among female undergraduate students in a university in the northeast (2.7%), had undergone a cosmetic surgical procedure (7).

Furthermore, a study was done among medical students in Al-Taif University and the results revealed that none of the participants had underwent plastic surgery in general before (8), which could mean a higher awareness of cosmetic procedures among medical students in Massachusetts and Al-Taif University than those in our study and in Al-Nahrain university. Regarding weather a person has a relative or friend who had underwent a rhinoplasty, (30.4%) had a family history of rhinoplasty, and (41.2%) had friends' history of rhinoplasty as a total of (71.6%), quite similar to Al-Nahrain which is (15%) individuals who had a family history of rhinoplasty, and (51%) of friends' history (6). Additionally, a study in Riyadh had a total of (54.1%) participants who had relatives or friends with previous rhinoplasty (9).

A very different result in Al-Taif University study revealed only (5.9%) of the participants who had a relative who underwent a cosmetic procedure (8), which might mean the high prevalence and knowledge of this procedure among the participants in our study and those in the studies, however, the opposite is true for Al-Taif study.

Regarding satisfaction (60.1%), of the participants were happy regarding their noses, which was higher than the results of a study performed among high school students in Iran, which was (47%) (4), and (48%) of the participants in Al-Nahrain study were also happy (6), which could explain the maturity of a person when in college as the individual develops higher self-esteem and thinks realistically in our study in Saudi Arabia and Iraq. however, among Iran young students, this could explain that their culture is more evident on the population and in the appearance of people. In addition, the age of the population was studied is younger than that in our study, which explains the developing in maturity that did not provide an extreme level of good self-esteem. The minority of the participants (23.2%) thinks that rhinoplasty is necessary, which is similar to that of Al-Nahrain study (28.5%), and that could be due to the high awareness of rhinoplasty procedures in both populations and the similarity in the cultures of Iraq and our country (6).

An opposite to the study was performed among healthcare workers in Nigeria with (65.3%) of the respondents who considered cosmetic surgery necessary.(10) and Regarding the supportiveness to a friend who would undergo a cosmetic surgery, our study had a (49.3%) of the participants in our study agreed to this, which was a little less than the (60.1%) of Nigerian healthcare workers studied (10), which confirms the difference in our culture of ours and that of the Nigerians' in addition to the difference in religion as in Muslim countries, rhinoplasty is discouraged, contrary to other countries whose religion might be different than Islam such as in Nigeria.

The majority of the participants in this study (80.7%) was not embarrassed to undergo cosmetic procedures similar to those of Al-Nahrain study which was (70.5%) (6).

Increased awareness in regarding real indications regarding complications, rhinoplasty, and the idea that it will possibly be the best decision for everyone exists in Saudi Arabia. Regarding acceptability in the country, (40.5%) of the participants in our study think that rhinoplasty is averagely acceptable; however in a Nigeria study, only (30.0%) of the participants think that rhinoplasty is averagely acceptable (10). It might be a bit higher in our study just because our sample was bigger than theirs.

Conversely, a study was done among medical students in Al-Taif University in a city near Jeddah, and (61.8%) of the participants who disagreed that cosmetic surgery is accepted socially (8), which could explain the slightly different culture of Al-Taif City; more strict in their religion.

A total of (34.6%) the participants in our study participants would undergo cosmetic surgery if it was performed for free, which was similar to the results of Al-Nahrain study (27.5%) (6).

Furthermore, a study was done among the general population in Riyadh which had a result of (24.8%) (9). The study on the Nigerian healthcare workers has a similar result (20.2%) (10), Which might be due to the idea that the surgery it is not necessary and only a very specific situation is will make their decision worth it, such as rhinoplasty performed for free.

Regarding gender, no significant difference in undergoing rhinoplasty was noticed similar to the results of the Iraq study (6).

Conversely, a significant association was noted in this study regarding gender and weather knowing somebody underwent cosmetic surgery would have an effect on their relationship (p value 0.029)similar to that of Al-Nahrain study, which also had a significant association (p value 0.002 2) (6), and that of the Swami V study (11).

### Conclusion

This study aimed to assess the perception and attitude of Fakeeh students towards cosmetic rhinoplasty. the results revealed that the percentage of participants who underwent rhinoplasty was (10.8%), and most students (60.1%) were happy regarding their noses, (40%) disagreed on the necessity of rhinoplasty, approximately (30%) had a family history of rhinoplasty, the majority feel that rhinoplasty is socially accepted in Jeddah, gender had significance toward the effect on the relationship with someone who underwent rhinoplasty with a P value = 0.029. Another significant was found regarding specialty and undergoing cosmetic procedures for free with a P value = 0.034.

### Limitation

Our sample size has limited our study in such that we required more males to be included, as females are the majority at Fakeeh College.

#### Students Attitude Towards Rhinoplasty

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