

Evaluation of Saudi Society Awareness in Saudi Arabia Toward Cosmetic Dermatology Facial Procedures and Its Complications

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ABSTRACT

Study Design: Cross sectional

Background: Cosmetic operations are becoming increasingly popular. Cosmetic operations are a fad in today's world; yet, some patients are compelled to have cosmetic procedures because of their employment. Many additional causes, such as economic progress and greater affordability, expanding middle class with high disposable incomes, revolution in the mass media and more awareness about cosmetic treatments, and the rise in medical tourism all contribute to this upward trend.

Methods: Data were collected, coded, and entered into the SPSS v20 software for descriptive statistics (mean standard deviation, frequencies, and percentages were computed) and to determine the significant differences among the variables. At a 5% level of significance, the t-test and chi-square test were performed. An electronic version of the questionnaire was used to collect data. King Khalid University in Saudi Arabia provided ethical approval. The ethical permission was obtained from the respondents. The study duration was from December 2020 to March 2021.

Results: 36% believed that Botox injection means proteins while 42.8% have no idea. 82.9 opted that cosmetic procedures have price matters. Fat injection means Fat cell 55.9% agreed with this, Filler injection means Hyaluronic acid 42.2% agreed with this. 62.4% had knowledge about cosmetics side effects. Regarding doctor selection search and consultation is the major factor (51.1%) while 38.8% selected doctor as per doctor reputation. Personal desire (50.1%) is the biggest motivation towards cosmetic surgery. 46.6% have future planned for cosmetic surgery while 29. % previously done it.

Conclusion: To properly manage these patients and spare them the financial, physical, and psychological toll of unneeded treatments, cosmetic treatment providers should strive to become more conversant with clinical guidelines and diagnostic criteria.

Keywords: Cosmetic dermatology, Facial, Procedures, Complications

INTRODUCTION

Cosmetic operations are becoming increasingly popular. Cosmetic operations are a fad in today's world; yet, some patients are compelled to have cosmetic procedures because of their employment. Many additional causes, such as economic progress and greater affordability, expanding middle class with high disposable incomes, revolution in the mass media and more awareness about cosmetic treatments, and the rise in medical tourism all contribute to this upward trend¹. The popularity of minimally invasive cosmetic operations is on the rise. The number of consumers seeking cosmetic treatment has more

than doubled since 2013, according to a 2017 poll by the American Society for Dermatologic Surgery (from 30% to 70%). Light and laser treatment, face rejuvenation injections, chemical peels, and body sculpting were the most frequent aesthetic procedures performed by dermatologists in 2016^{2,3}.

Cosmetic surgery has been a common practice in Asia, with China and India leading the way as Asia's largest cosmetic surgery markets. social knowledge and acceptability of cosmetic treatments, as well as an increasing socio-cultural emphasis on beauty, have been

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suggested as enabling factors by researchers. However, only a few studies have looked at the factors that influence patients' decisions to undergo noninvasive and minimally invasive aesthetic dermatologic procedures^{4,5}.

Cosmetic dermatology is a branch of dermatology that focuses on improving one's appearance. Cosmetic dermatological procedures are becoming more popular around the world, although public awareness of them is low, not just among the general public but also among health professionals. People's concerns about their appearance are progressively growing in both developed and developing worlds, resulting in an increase in the number of cosmetic procedures performed each year⁶⁻⁸. In 2007, 11.7 million cosmetic treatments were performed in the United States, with the vast majority being minimally invasive procedures. The main objective of this study is to evaluate the Saudi society awareness in Saudi Arabia towards cosmetic dermatology facial procedures and the associated complications⁹.

METHODS

A questionnaire was used to collect data in this cross-sectional study. After a series of conversations with a panel of experts (which included a subject specialist, researcher, and language expert), a questionnaire was created. The questionnaire's Cronbach alpha was computed, and contained questions about cosmetics awareness, complications, and demographic characteristics. The research was carried out in Saudi Arabia's Aseer region.

Data were collected, coded, and entered into the SPSS v20 software for descriptive statistics (mean standard deviation, frequencies, and percentages were computed) and to determine the significant differences among the variables. At a 5% level of significance, the t-test and chi-square test were performed. An electronic version of the questionnaire was used to collect data. King Khalid University in Saudi Arabia provided ethical approval. The ethical permission was obtained from the respondents. The study duration was from December 2020 to March 2021.

RESULTS

Table 1: Demographics

| Age | | | |
|----------------------|-----------|---------|--|
| | Frequency | Percent | |
| Less than 18 | 122 | 5% | |
| 18-30 | 1402 | 54% | |
| 31-40 | 644 | 25% | |
| 41-50 | 306 | 12% | |
| More than 50 | 128 | 5% | |
| Educational Level | | | |
| | Frequency | Percent | |
| Elementary school | 63 | 2% | |
| Middle school | 99 | 4% | |
| High school | 692 | 27% | |
| University graduates | 1593 | 61% | |
| Postgraduate | 155 | 6% | |
| Gender | | | |
| | Frequency | Percent | |
| Male | 530 | 20% | |
| Female | 2072 | 80% | |
| Income Average | | | |

| | Frequency | Percent |
|---------------------------|-----------|---------|
| Less than 5000 per month | 828 | 32% |
| 5000 to 15000 per month | 1183 | 45% |
| More than 15000 per month | 591 | 23% |
| Occupation | | |
| | Frequency | Percent |
| Student | 874 | 34% |
| Teacher | 383 | 15% |
| Health sector | 213 | 8% |
| Military sector | 60 | 2% |
| Private sector | 219 | 8% |
| Unemployed | 566 | 22% |
| Other | 287 | 11% |
| Living Area | | |
| | Frequency | Percent |
| South | 745 | 29% |
| North | 485 | 19% |
| Middle | 710 | 27% |
| East | 293 | 11% |
| West | 369 | 14% |

As per table 1, 54% lying in 18-30 years' age group while 25% were in 31-40 years' age group, 61% have university education, 80% were female while 20% were male, 45% have income group between 5000 to 15000 SAR, while 32% have less than 5000, 33% were students while 22% were un employed. 29% were belongs to South region while 27% and 19% were from middle and north regions.

Table 2: Knowledge and practices

| Best Sources to Get Cosmetic Procedure Information | | |
|--|-----------|---------|
| | Frequency | Percent |
| TV shows | 40 | 1.5% |
| Health workers | 1200 | 46.1% |
| Medical websites | 592 | 22.8% |
| Family and friend experiences | 517 | 19.9% |
| Social media | 253 | 9.7% |
| Botox Injections Mean | | |
| | Frequency | Percent |
| Proteins | 936 | 36.0% |
| Hyaluronic acid | 457 | 17.6% |
| Fat cells | 96 | 3.7% |
| Don't know | 1113 | 42.8% |
| Did You Ask Your Doctor About Cosmetic Procedure Details | | |
| | Frequency | Percent |
| Always | 1165 | 44.8% |
| Mostly yes | 866 | 33.3% |
| Mostly no | 295 | 11.3% |
| Never asked | 276 | 10.6% |
| Does Cosmetic Procedure Price Matter | | |
| | Frequency | Percent |

| | | |
|-------|------|--------|
| Yes | 2156 | 82.9% |
| No | 446 | 17.1% |
| Total | 2602 | 100.0% |

| Fat Injections Mean | | |
|---------------------|-----------|---------|
| | Frequency | Percent |
| Proteins | 105 | 4.0% |
| Hyaluronic acid | 60 | 2.3% |
| Fat cells | 1454 | 55.9% |
| Don't know | 983 | 37.8% |

| Filler Injections Mean | | |
|------------------------|-----------|---------|
| | Frequency | Percent |
| Proteins | 305 | 11.7% |
| Hyaluronic acid | 1097 | 42.2% |
| Fat cells | 95 | 3.7% |
| Don't know | 1105 | 42.5% |

| Knowledge About Possible Side Effects of Any Cosmetic Procedure | | |
|---|-----------|---------|
| | Frequency | Percent |
| Yes | 1624 | 62.4% |
| No | 978 | 37.6% |

| Motivating Cause to Choose Certain Doctor | | |
|---|-----------|---------|
| | Frequency | Percent |
| Doctor reputation | 1009 | 38.8% |
| Offers | 144 | 5.5% |
| Closest clinic | 59 | 2.3% |
| After search and counseling | 1330 | 51.1% |
| Any doctor | 60 | 2.3% |

| Motivating Cause to do Cosmetic Procedure | | |
|---|-----------|---------|
| | Frequency | Percent |
| Medical needs | 799 | 30.7% |
| Personal desire | 1302 | 50.1% |
| Family and friends experience | 233 | 8.9% |
| Social media | 268 | 10.3% |

| Planning for Future Cosmetic | | |
|------------------------------|-----------|---------|
| | Frequency | Percent |
| Yes | 1212 | 46.6% |
| No | 1390 | 53.4% |

| Previous Facial Cosmetic | | |
|--------------------------|-----------|---------|
| | Frequency | Percent |
| Yes | 757 | 29.1% |
| No | 1845 | 70.9% |

As per table 2, 46.1% got information from health workers, while 22.8% from websites. 36% believed that Botox injection means proteins while 42.8% have no idea. 82.9 opted that cosmetic procedures have price matters. Fat injection means Fat cell 55.9% agreed with this, Filler injection means Hyaluronic acid 42.2% agreed with this. 62.4% had knowledge about cosmetics side effects. Regarding doctor selection search and consultation is the major factor (51.1%) while 38.8% selected doctor as per doctor reputation. Personal desire (50.1%) is the biggest motivation towards cosmetic surgery. 46.6% have future planned for cosmetic surgery while 29. % previously done it.

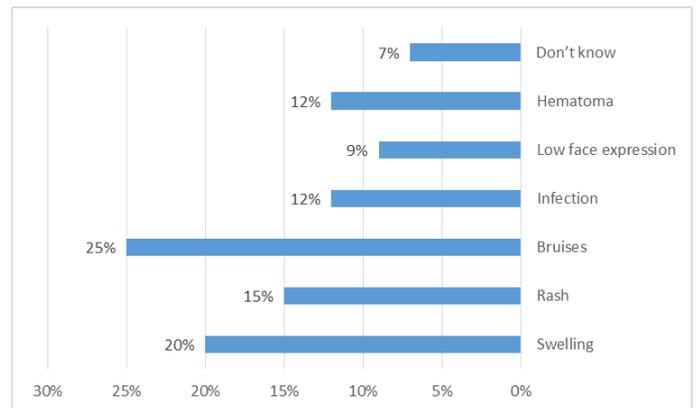


Figure 1: Knowledge about Side Effects

As per figure 1, 25% consider bruises while 20% swelling as a major side effects.

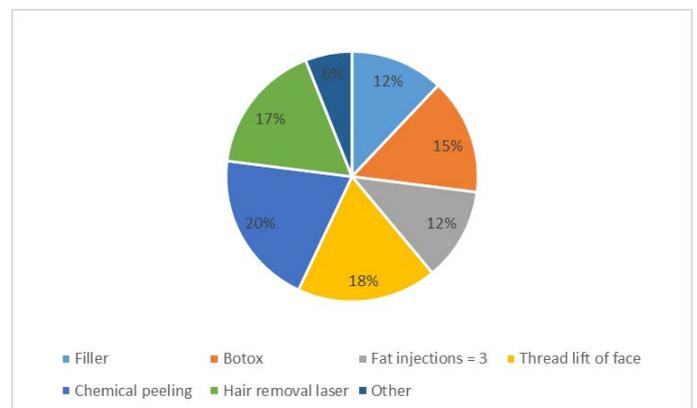


Figure 2: Procedures

As per figure 2, 20% opted filler, while 18% opted other categories of procedures.

Table 3: Comparison between gender and motivations

| Gender | | Medical needs | Personal desire | Family and friends experience | Social media |
|--------|--------|---------------|-----------------|-------------------------------|--------------|
| | | Male | 233 | 165 | 45 |
| | Female | 566 | 1137 | 187 | 205 |
| Total | | 799 | 1302 | 232 | 269 |

p = 0.0001

As per table 3, we have observed significant differences between genders and motivations towards cosmetic surgery.

DISCUSSION

To our knowledge, this is the first multicenter prospective observational study evaluating patients' motivations for minimally invasive cosmetic operations in Saudi Arabia. It verified and extended the findings of recent single-center investigations. The desire to have clear-looking, beautiful skin and a younger, appealing appearance were the most popular reasons given by patients seeking cosmetic treatments. Motives related to psychological well-being, such as a desire to feel happier

or better in general, improve overall quality of life, treat oneself, feel rewarded, or rejoice were also frequently mentioned. The motivations of cost and convenience were uncommon¹⁰⁻¹².

In line with previous studies, our study showed significant differences regarding the motivation factors among genders¹³. Patients seeking laser treatment for pigmentation or erythema were mostly motivated by cosmetic concerns, such as the desire for clearer-looking skin that appeared more youthful and appealing, as well as the need to repair harm to their appearance. Those interested in treating brown spots or melasma and redness/spots and rosacea were driven to look good without makeup. The most prevalent reasons for liposuction, noninvasive fat removal, and cellulite treatment were cosmetic appearance and mental well-being¹⁴.

Patients frequently stated that television and other forms of media influenced their decision to seek cosmetic treatment, although television and other forms of media were among the least frequently cited reasons. Patients who are impacted by the media do not appear to be aware of it or were afraid to accept it. Nearly a quarter said a physician's referral prompted their first presentation, and another quarter said friends and family.

This conclusion emphasizes the relevance of social norms and is consistent with previous researches who found that knowing someone who has received cosmetic surgery indicates a patient's interest in the procedure¹⁵.

This study has a significantly larger and more diversified sample than any other study that we are aware of. Patients from numerous sites, all geographic regions, university and private practices, and patients who were actively getting therapy as well as those seeking advice were included in the study. Despite the fact that the cosmetic operations explored were numerous, different, and even heterogeneous, they all had the same goal in mind, and that was to modify visible cutaneous signs of skin aging, notably colour, and texture problems using minimally invasive procedures. This study has several limitations, but it adds to our understanding of the motivations of patients who visit cosmetic dermatology clinics. As expected of a patient population seeking aesthetic operations, the majority of respondents were female. In addition, the sample sizes for numerous subgroups were quite tiny.

CONCLUSION

In poorer countries, awareness about cosmetic surgery is still lacking. Our research contributes to a better understanding of cosmetic surgery acceptance from a cross-cultural perspective. To properly manage these patients and spare them the financial, physical, and psychological toll of unneeded treatments, cosmetic treatment providers should strive to become more conversant with clinical guidelines and diagnostic criteria.

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and revising it critically for important intellectual content; and (3) final approval of the manuscript version to be published. Yes.

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Competing Interest: None

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