

# Trends and demographic characteristics of Saudi cosmetic surgery patients

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## ABSTRACT

**الأهداف:** تقديم الخصائص الديموغرافية للمرضى السعوديين الذين يخضعون لإجراءات تجميلية.

**الطريقة:** أجريت هذه الدراسة الاستقصائية المستقبلية في 3 مراكز خاصة للجراحة التجميلية في مناطق مختلفة من المملكة العربية السعودية (الرياض وجدة) خلال الفترة من يناير وأغسطس 2016م. تم استخدام الاستبيان المصحح مع التعديل وقدمت معلومات المريض التالية: الفئة العمرية، والطول، والوزن، والحالة الزوجية، وعدد الأطفال، وعمر زوج المريض، والمستوى التعليمي، والدخل الشهري، واسم الإجراء التجميلي، وأسماء أي إجراءات تجميلية سابقة وسبب إجراء التجميل.

**النتائج:** وكشفت الدراسة الحالية أن مرضى الجراحة التجميلية السعوديين هم من خريجي الجامعات، متزوجين (46.8%)، وعاملين (68.3%)، وتتراوح أعمارهم بين 20 و 40 عام (70%)، مع دخل شهري مرتفع إلى حد ما.

**الخاتمة:** هناك علاقة إيجابية محتملة بين الجنسين والخضوع لعملية التجميل. يعد كلا من إزالة الشعر بالليزر، والبوتوكس، وشفط الدهون، وحشو، وتنقيح الندب شائع بين الإناث، في حين أن عملية تجميل الأنف هو إجراء شائع بين الذكور.

**Objectives:** To present the demographic characteristics of Saudi patients undergoing cosmetic procedures.

**Methods:** This prospective study survey was conducted in 3 private cosmetic surgery centers in different regions of Saudi Arabia (Riyadh and Jeddah) between January and August 2016. Validated questionnaire with modification was used and the following patient's information were provided: age group, height and weight, marital status, number of children, age of the patient's spouse, educational level, monthly income, name of the cosmetic procedure, names of any previous cosmetic procedures and their reason for cosmetic procedure.

**Results:** The present study revealed that a typical Saudi cosmetic surgery patients are university

graduates, married (46.8%), employed (68.3%), and middle aged 20-40 years of age (70%), with a fairly high typical monthly income.

**Conclusion:** There is a possible positive correlation between gender and undergoing cosmetic procedure. Laser hair removal, botox, liposuction, filler, and scar revision are common among females, while rhinoplasty is a common procedure among males.

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The number of females who undergo cosmetic surgery in Saudi Arabia has increased dramatically over the last few years. This demonstrates that cosmetic surgery is becoming a new trend related to beauty ideas, especially for women and to some extent for men. However, increasing awareness of cosmetic procedures is wreaking havoc on women in ways that far exceed the bounds of monthly income, educational status or age. The trends are changing and the age of women undergoing cosmetic surgery procedures is decreasing. This new level of spending on cosmetic alteration is taking a terrible toll in all areas of women's lives, from economic well-being to health and interpersonal relationships. Women are spending large amounts of money on cosmetic surgical procedures, and the numbers are increasing. In another study, young people aged 19-34 years old had the highest approval rating for surgical procedures.<sup>1</sup>

**Methods.** The present study was performed on Saudi patients seeking cosmetic surgery at 3 cosmetic surgery private hospitals in different regions of Saudi Arabia (Riyadh and Jeddah) between January and August 2016. A previously validated published questionnaire with modification (Appendix 1) was used and included the following patient information: age group, height and weight, marital status, number of children, age of the patient's spouse, educational level, monthly income, name of the cosmetic procedure, names of any previous cosmetic procedures, and their reason for cosmetic procedure.

The inclusion criteria included all patients seeking cosmetic surgical procedures in the study period. The exclusion criteria were incomplete questionnaires.

The data were used as a means to measure the increasing number of cosmetic procedures in various age groups. Pearson's correlation was performed between the study variables and undergoing cosmetic surgery. Data and Statistical Package for Social Sciences software version 21.0 (SPSS Inc, Chicago, IL, USA) were used for data processing. A literature review was performed to obtain the demographic features of cosmetic procedures and surgeries of previous studies. No studies from the Kingdom of Saudi Arabia.

**Results.** The sample size was planned to involve 2,000 subjects; however, only 1,864 patients were assessed due to missing or incomplete data. Within this sample, 1,687 (90.5%) were females and 177 (9.5%) males and most were Saudis. Both single and married subjects had an equal aptitude for cosmetic procedures (Table 1).

A total of 605 (26.2%) subjects underwent a laser hair removal, 439 (19%) underwent a Botox procedure, and 330 (14.3%) underwent liposuction (Figure 1). Most participants (578 or 31%) had a cosmetic procedure to look more beautiful.

**Discussion.** External motivators for cosmetic surgery include the desire to avoid ethnic prejudice, fear of age discrimination, and direct or subtle, indirect coercion by a spouse. Internal motivators include the desire to diminish unpleasant feelings of depression, shame or social anxiety as well as the desire to obtain a powerful appearance that will facilitate career advancement.<sup>3</sup>

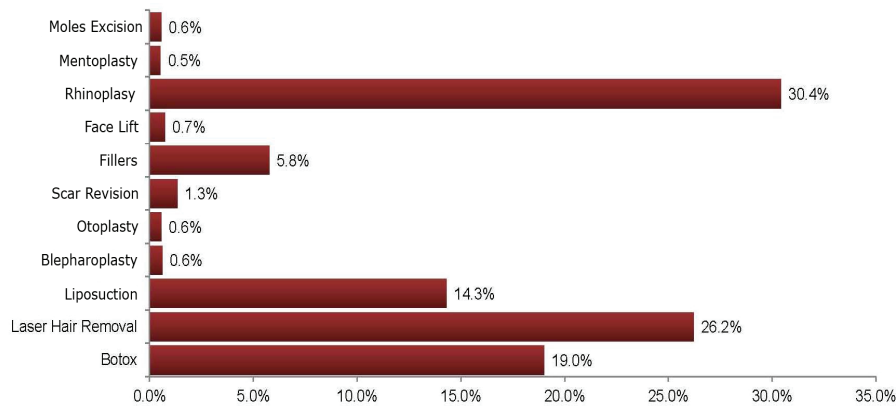
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In 2005, there were 10.2 million cosmetic procedures performed in the United States, an increase of 11% from 2004 and a 38% increase compared with 2000.<sup>4</sup> This number includes 3,839,387 Botox treatments, 1,033,581 chemical peels, 837,711 microdermabrasions, 782,732 laser hair removals, 589,768 vein sclera therapies (stripping), 323,605 liposuctions, 298,413 rhinoplasties (nose jobs), 291,350 breast augmentations, 230,697 blepharoplasties (eyelid reconstructions), 134,746 abdominoplasties, and 114,250 breast reductions. According to the statistics, 84% of patients undergoing cosmetic procedures were

**Table 1** - Demographic characteristics of patients.

Items	n (%)	
<i>Gender</i>		
Male	177	(9.5)
Female	1,687	(90.5)
<i>Age</i>		
>40 years	414	(22.2)
20-40 years	1,305	(70.0)
<20 years	145	(7.8)
<i>Marital status</i>		
Single	843	(45.2)
Married	872	(46.8)
Widowed	149	(8.0)
<i>Education</i>		
University Graduates	1,391	(74.6)
Secondary School	326	(17.5)
Post Graduates	147	(7.9)
<i>Anthropometric measures</i>		
Height	162.3±7.2 cm	
Weight	65.6±23.5 kg	
<i>Age of Spouse</i>	36.9±8.4 years	
<i>Employment Status</i>		
Employed	1,273	(68.3)
Business Work	296	(15.9)
Unemployed	295	(15.8)
<i>Monthly Income</i>		
5000-10000 SR (1,300 to 2,600 USD/month)	887	(47.6)
<5000 (<1,300 USD/month)	591	(31.7)
>10000 (>2,600 USD/month)	386	(20.7)
<i>Reason</i>		
To look younger than their spouse	533	(28.6)
To improve self-esteem	84	(4.5)
To cope with life changes	63	(3.4)
To look younger than their age/friends	504	(27.0)
To look more beautiful	578	(31.0)
To please a significant other	52	(2.8)
To accompany a milestone (wedding, 40th birthday, reunion, etc.)	37	(2.0)
Other reasons	13	(0.7)

Data are expressed to identify the percentage's trends and demographic characteristics of cosmetic surgery



**Figure 1** - Percentages of patients underwent different types of cosmetic surgeries.

Caucasians and 90% were female.<sup>4</sup> The top 5 minimally invasive procedures among women included Botox injection, chemical peel, laser hair removal, microdermabrasion, and sclera therapy. The top 5 surgical procedures were breast augmentation, liposuction, nose reshaping, eyelid surgery, and tummy tuck.<sup>5</sup> Many studies describe the characteristics of cosmetic surgery recipients<sup>6,7</sup> from other regions of the world, but there are no reports from Saudi Arabia. Thus, the present study was therefore undertaken. In our study, the prevalence of higher economic status among subjects may reflect a greater ability to access cosmetic surgery procedures, as would higher educational levels. These data can be used to note characteristics of future patients who can afford more cosmetic procedures.

These data also reveal that in Saudi culture, while 20-40 years of age was the most common age at which individuals use cosmetic alterations, the extremes of age were not exempted and people older than 40 years of age were also seeking cosmetic renovations. Trends indicate that younger Saudis are also motivated to undergo cosmetic surgery procedures.

This study showed that there are 2 significant subsets of patients represented with respect to partners, those older than their partners and those younger than their partners.

The present study shows that the main reason for undergoing cosmetic procedures is to look more beautiful and to compete in attractiveness with other ladies in the pursuit of marriage. Some other motivational reasons include a person's desire to look younger than their spouse (possibly in order to improve the security of their marriage), and younger Saudi women's desire to have cosmetic surgery to look younger than their friends.

**Study limitations.** This study included a limited number of patients and included only 3 hospitals. Further pooled studies are desired to study the success of cosmetic surgery depending on baseline demographics and the outcome of this study.

In conclusion, the results of this study could be helpful in determining needs and motivations among private practice patients. Additionally, it could assist in the development of marketing strategies for both physicians and companies with cosmetic products.

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**Appendix 1** - Questionnaire given out to participating patients.

**Check the procedure(s) for which you are here today:**  
 Botox                       Leg Veins                       Cellulite Treatment  
 Restylane                       Tattoo Removal                       Laser Hair Removal  
 Liposuction                       Peels/Microderm                       Fraxel/Laser

**Check the procedure(s) for which you have had in the past:**  
 Botox                       Leg Veins                       Cellulite Treatment  
 Restylane                       Tattoo Removal                       Laser Hair Removal  
 Liposuction                       Peels/Microderm                       Fraxel/Laser

**Gender:**  
 Male                       Female

**Number of Children:**  
 Please specify \_\_\_\_

**Marital Status:**  
 Married                       Divorced                       Widowed  
 Separated                       Single, never married

**Your age:**  
 Please specify \_\_\_\_

**Age of partner:**  
 Please specify \_\_\_\_

**Highest Education Level:**  
 Some high school                       High school graduate (or equivalent)                       Some college  
 College Graduate                       Postgraduate/Professional

**Work Status:**  
 Work outside home full time                       Work at home                       Unemployed  
 Work outside home part time                       Student                       Retired

**What is your job title and/or job responsibilities:**  
 Please specify \_\_\_\_\_

**Which one of the following reasons is the most important reason for your procedure today?**  
 To look younger than their spouse  
 Self-esteem  
 Coping with life changes  
 To look younger than my age/friends  
 To look more beautiful  
 Significant other wanted you to  
 Milestone (wedding, 40<sup>th</sup> birthday, reunion, etc.)  
 Other \_\_\_\_\_