

## Research Article

### Acceptance of the General Population about Facial Fillers, a Case-Study in Sulaimani City

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#### Abstract

**Introduction:** The American Society of Plastic Surgeons states in 2016 that injectable fillers have become a popular option for facial rejuvenation. The main reason for its popularity and rapid spread can be traced back to the uses of facial fillers; restore facial volume, reverse aging, and enhance the shape and contours of the face. The aging of the skin become apparent by the thinning of the dermis and epidermis, a decrease in collagen, dermal elastosis, and actinic damage, causing laxity, rhytids, and pigment irregularities. With the widespread facial fillers around the world and specifically inside Sulaimani city, this research aims at exploring the general population's response and acceptance of these types of procedures.

**Materials and Methods:** The researcher commissioned a local survey to gather the opinions of men women from Sulaimani city on the concepts of beauty, facial aesthetics, skincare routines and treatments involving injectables and dermal fillers. 200 (potential) patients (male and female) from the general population have been approached with a questionnaire regarding their personal and subjective views on facial fillers. The questions have been designed in a way as not to promote facial fillers in any way, nor to cause anxiety in the patients regarding their choices nor hint at any "right beliefs". In addition, the questionnaire asked patient's demographic data such as age, sex, education level, psychological aspects, and reasons for seeking facial filler or avoiding it.

**Results:** The sample group was divided into three age groups: 18–29 years old, 30–49 years old and 50-65 years old. And it was found out that 70% (n=140) of the patients had undergone some type of cosmetic procedure, not limited to facial fillers. And around 75% (n=116) of the people who have undergone cosmetic procedures or are contemplating the idea said they would truthfully announce it to their friends and families and they did not see any reason to

hide their procedure. The people who wanted to keep it a secret 25% (n=38) wanted to due to the following reasons: embarrassment/shame, concern over 'being judged', maintaining perception of 'natural' looks, maintaining privacy.

**Discussion:** This research shows how aware the general population of Sulaimani is about cosmetic procedures in general and facial fillers specifically, even if someone hasn't undergone these kinds of procedures themselves. The general population is very accepting of this new trend and ease of access of altering and/or changing any feature that people don't particularly like in their faces (and bodies). The city has opened itself to globalization and is more internationally focused, thus it likes to update itself with the latest trends and strives to increase their "happiness" even if it is on a superficial level.

**Conclusion:** Alterations through medical procedures is being explored more, while they have also become much safer, the focus now is more on restoring volumetric harmony. This research shows the awareness level of the general population of Sulaimani about cosmetic procedures in general and facial fillers specifically, even those who haven't undergone these kinds of procedures themselves. Cosmetic procedures are highly impactful since they can potentially improve people's lives, even when sometimes it is for the wrong reasons such as on a partner's request, due to filtered posts on social media, influences by other people's opinions and lastly to get rid of visible signs of aging. Facial fillers are not just used for anti-aging benefits any longer, now they are also used for contouring, enhancing facial features, and changing emotional attributes to the appearance of the face. For this and for many other personal reasons the demand for facial fillers has increased in the last decade.

**Keywords:** Accepting; Cosmetic procedure; Facial fillers; Popularity; Questionnaire; Sulaimani

#### Introduction

The American Society of Plastic Surgeons states in 2016 that injectable fillers have become a popular option for facial rejuvenation, over 2 million dermal filler treatments were performed that year in the US alone. The main reason for its popularity and rapid spread can be traced back to the uses of facial fillers; restore facial volume, reverse aging, and enhance the shape and contours of the face [1]. These benefits of facial fillers are very appealing, especially to people in their 29-45 who are noticing early signs of aging on their faces, who directly opt for facial fillers to delay their aging process. Since the emergence of fillers in the early 1980s, where substances such as bovine collagen was used to manufacture the fillers which were associated with hypersensitivity, people have underwent facial fillers, but at current time when fillers are incorporated with greater biocompatibility and safety profiles, people are opting for it substantially more [2]. Now there is even a wider range of commercial fillers available including Hyaluronic Acid (HA), calcium hydroxylapatite, and Poly-L-lactic acid products [1].

Since the face is composed of multiple layers, first with a superficial tissue later extending deeply to the facial skeleton. Genetic and environmental factors cause changes in skin elasticity, texture, and strength, leading to the formation of superficial rhytids [3]. The

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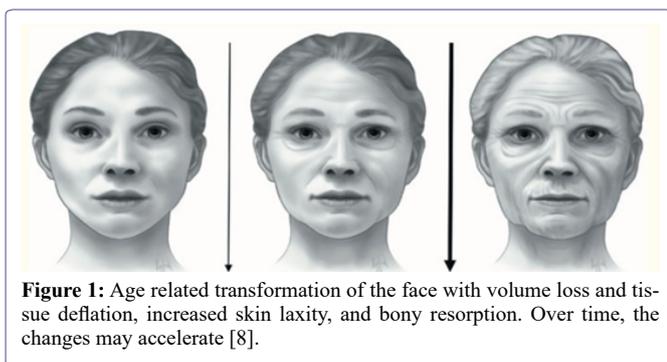
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aging of the skin becomes apparent by the thinning of the dermis and epidermis [4]. A decrease in collagen, dermal elastosis, and actinic damage, causing laxity, rhytids, and pigment irregularities [5]. In Table 1 and Figure 1 age related changes per decades of age are laid out. Since most of the muscles in the face are involved in facial expressions, changes in their activity, laxity of dermal attachments, and atrophy and descent of surrounding fat pads have profound implications for static and dynamic appearance [6].

≤20s years	30s–40s years	50+ years
Smooth, glowing skin	Onset of fine rhytids and photodamage	Deepening static and dynamic rhytids with significant photodamage
Continuous contours	Onset of facial grooves and folds	Volume/projection loss at all tissue levels
Defined facial borders	Increased soft tissue laxity	Deepened folds
		Gravitational descent from significant tissue laxity and volume loss

**Table 1:** Typical Age-related Changes in Facial Appearance and Their Common Decade of Occurrence [7].



**Figure 1:** Age related transformation of the face with volume loss and tissue deflation, increased skin laxity, and bony resorption. Over time, the changes may accelerate [8].

With the widespread cosmetic procedures around the world and specifically inside Sulaimani city, it is worth exploring the general population's response and acceptance of these types of procedures. A cosmetic procedure is defined as any intervention that involved cosmetic correction and/or alteration of existing body features. It also includes minimally invasive procedures, such as botulinum toxin injections and fillers, as well as major surgical procedures, such as liposuction, rhinoplasty, and breast augmentation [8].

## Materials and Methods

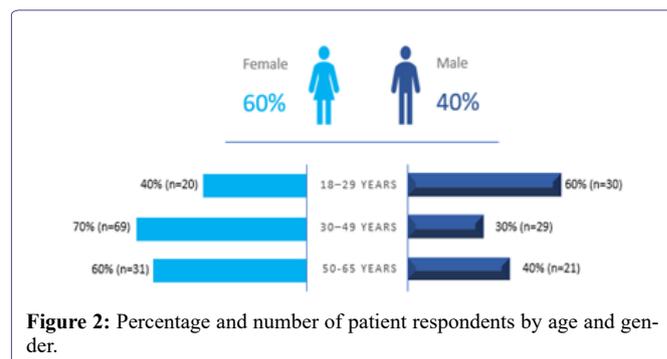
200 potential patients (male and female) from the general population have been approached with a questionnaire regarding their personal and subjective views on facial fillers, inform consent has been taken from all the 200 participants before having them participate in this questionnaire. 100 of the patients were without any history of facial fillers; their views regarding facial fillers and their facial appearance satisfactions were questioned. 100 of the patients had undergone some form of facial procedure and the reasons behind their approach to undergo these kinds of procedures were explored. The patients who underwent the facial procedures were adults between the ages of 18-64 who received the facial procedures in both public and private hospitals who were asked to participate in this survey were from different academic, religious, ethnic and social backgrounds, different ages (between 18-65 years old), from both sexes, even members from the LGBTI were approached and participated in the survey as to get a true representation of all the diverse groups in the city.

The questions have been designed in a way as not to promote facial fillers in any way, nor to cause anxiety in the patients regarding their choices nor hint at any "right beliefs". In addition, the questionnaires asked patient's demographic data such as age, sex, education level, psychological aspects, and reasons for seeking facial filler or avoiding it. The questionnaire is composed of 16 detailed questions, the first section is designed in a way to further examine the general knowledge of the patients about facial procedures. This gives an overview of the information the general population of Sulaimani city has on facial procedures. While the second part of the questionnaire goes into details on the personal choice of the patients regarding perusing any kinds of facial procedures, their personal views on the whole trend which has now become very popular in the area.

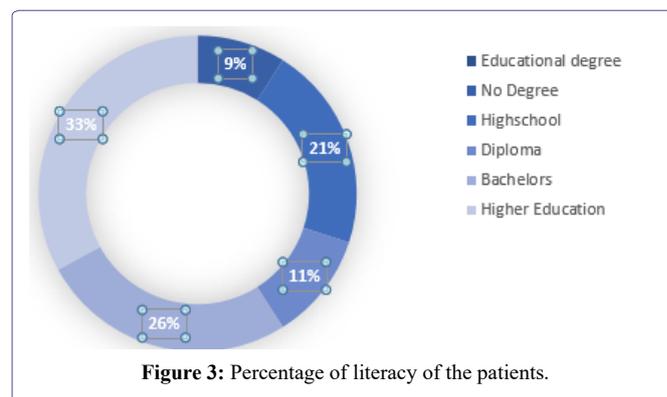
## Results

After inclusion and exclusion criteria were met, 200 patients participated in this study, 100 of the patients were without any history of facial fillers and 100 of the patients had undergone some form of facial procedures. The sample was composed of 120 female and 80 male patients.

The sample group was divided into three age groups: 18–29 years old, 30–49 years old and 50-65 years old. The characteristics of the patients are mentioned in detail in (Figure 2). While their literacy level is shown in (figure 3)



**Figure 2:** Percentage and number of patient respondents by age and gender.



**Figure 3:** Percentage of literacy of the patients.

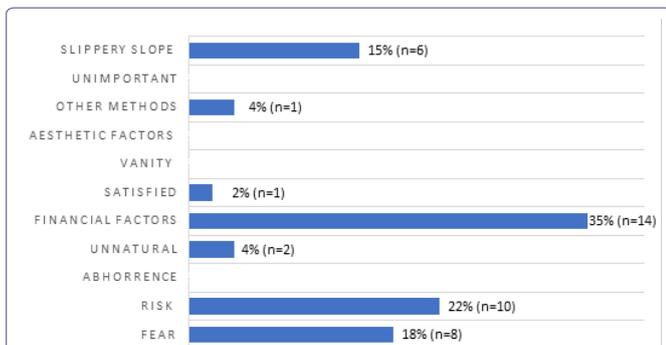
Out of the 100 patients who had not pursued any facial procedures, 40% (n=40) had undergone other forms of cosmetic procedures (such as rhinoplasty, mastopexy, liposuction in the thighs and stomach, laser treatment etc.). The first 8 questions of the questionnaire were designed to test the general knowledge of the patients on facial procedures and fillers, Table 2 shows a short overview of their knowledge, that even though 50% (n=100) of the patients had never undergone any facial procedures, it shows that people are very aware of the

procedures, types, benefits, and side effects. The only thing that most of the patients, even the ones who had undergone facial filler procedures, did not know was the composition of the facial filler materials, only 15% (n=30) of the patients knew what fillers are made of. The complete questionnaire is attached in Annex I.

Questions	Patient's answers		
	Correct	Incorrect	Not answered
What are facial fillers?	80% (n=160)	15% (n=30)	5% (n=10)
Where are facial fillers used?	95% (n=190)	2% (n=4)	3% (n=6)
How do facial fillers work?	80% (n=160)	3% (n=6)	17% (n=34)
What are the benefits of fillers?	65% (n=130)	30% (n=60)	5% (n=10)
What are fillers made up of?	15% (n=30)	75% (n=150)	10% (n=20)
Are there any side effects of facial fillers?	82% (n=164)		7% (n=14)

**Table 2:** Showing the patient's general knowledge on facial fillers.

The second part of the questionnaire goes into details on the personal choice of the patients regarding pursuing any kinds of facial procedures and their personal views on the whole trend which has now become very popular in the area. We found out, through the questionnaire, that 45% (n=90) of the people who have not pursued any facial procedures is due to fear of complications that might follow as a result of any kind of cosmetic procedure, especially the ones in the face, which are most visible. The people who have not had any kinds of cosmetic procedure (n=80); almost half of them (48% (n=37)) are contemplating the idea to undergo cosmetic procedures, while more than half does not even consider getting any kinds of cosmetic procedures. The reasons of why these individuals (52% of the 80 patients who have not had any kind of cosmetic procedure) have never considered cosmetic procedures are shown in (Figure 3).



**Figure 3:** Showing the reasons the 42 patients who have never considered cosmetic procedures.

The main reason listed by most of the patients (60% (n=92)) who have or are considering undergoing cosmetic procedures are their concerns about visible aging signs, a small group 15% (n=23) listed their desire to change the way they looked as the reason they opt for facial fillers. The remaining 25% (n=39) listed that people's influence and the fact that they compare themselves with other people and people from the media channels has encouraged them to undergo facial fillers. And around 75% (n=116) of the people who have undergone cosmetic procedures or are contemplating the idea said they would truthfully announce it to their friends and families and they did not see any reason to hide their procedure. The people who wanted to keep it a secret 25% (n=38) wanted to due to the following reasons:

embarrassment/shame, concern over 'being judged', maintaining perception of 'natural' looks, maintaining privacy.

Most of the patients 80% (n=160) (including the ones who have no personal experience with facial fillers nor cosmetic procedures) believe that life after cosmetic procedures will be positively different in that the self-confidence of the patients will increase and in turn their happiness level will go up, while at the same time they find these procedures sustainable and that is why most of the patients have undergone some form of cosmetic procedure along with facial fillers.

## Discussion

Alterations through medical procedures is being explored more [9]. while they have also become much safer, the focus now is more on restoring volumetric harmony [10]. This research shows the awareness level of the general population of Sulaimani about cosmetic procedures in general and facial fillers specifically, even those who haven't undergone these kinds of procedures themselves. Delaying the signs of aging is being approached more widely through non-surgical procedures.

The desired effects are not achievable only through topical therapies, lasers or energy-based devices, subtle esthetic amendments can be made with minimally invasive techniques, and this has increased the popularity of fillers [11]. While at the same time permanent and semipermanent fillers are available, such as hyaluronic acid, with minor chance of hypersensitive reactions and reversible effects, its popularity amongst physicians has also increased [12].

Cosmetic procedures are highly impactful since they can potentially improve people's lives [13]. Even when sometimes it is for the wrong reasons such as on a partner's request, due to filtered posts on social media, influences by other people's opinions and lastly to get rid of visible signs of aging. Facial fillers are not just used for anti-aging benefits any longer, now they are also used for contouring, enhancing facial features, and changing emotional attributes to the appearance of the face [14]. For this and for many other personal reasons the demand for facial fillers has increased in the last decade [15].

People also shared, in the comments section of the questionnaire, that new technology and all the facial cosmetic procedures which are now available inside the city have made their lives easier, they no longer have to travel abroad for facial procedures, they are faced with less risk and complication of the facial filler procedures, and they can visit their doctors regularly with any complaints they might have.

The general population is very accepting of this new trend and ease of access of altering and/or changing any feature that people don't particularly like in their faces (and bodies). A recent study concluded that 88% of patients who have considered facial cosmetic procedures and gone in for doctor consultations ended up having the procedure done [16-18]. Facial fillers' use has become the second most used cosmetic procedure pursued worldwide.

## Conclusion

This research provides insight into the general population's views and opinions on cosmetic procedures in general and facial fillers specifically in Sulaimani city-Iraq. The increasing demand for cosmetic procedures in younger individuals recently has been linked to media portrayals, a reduction in stigma, and higher levels of disposable income. The Middle Eastern youth's concept of ideal body shape is in alignment with the Western ideas of beauty.

Through this research, it can be concluded that the general population of Sulaimani is aware and accepting of facial fillers. It is becoming a widespread phenomenon where more than 50% of the population are having procedures and “rectifying” the parts in their faces which they wish to change. And it is worth to mention that most of the participants don’t even feel like they would need to hide the fact that they have undergone any types of procedures, which is the ultimate level of acceptance.

## Disclosure

The corresponding author has no conflict of interest in this work to report.

## Annex I

[https://www.heraldopenaccess.us/fulltext/Dentistry-Oral-Health-&-Cosmesis/DOHC\\_Annex.docx](https://www.heraldopenaccess.us/fulltext/Dentistry-Oral-Health-&-Cosmesis/DOHC_Annex.docx)

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