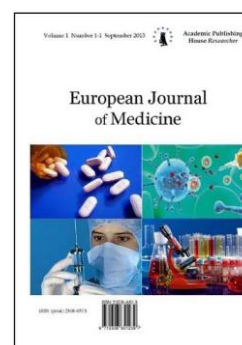


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## Feeling Elated: A Grounded Theory Study of Rhinoplasty

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### Abstract

#### Background

Rhinoplasty is the most common cosmetic surgery in Iran while more than half of that is not necessary. Because of lacking the qualitative studies in this field, the authors prompted to conduct this research. The aim of this study was to explore the experience of people who undergo Rhinoplasty in order to prevent unnecessary operation.

#### Methods

Sixteen participants were recruited based on the theoretical sampling from the people who referred to ENT or aesthetic clinic and by the people who knew these individuals who underwent Rhinoplasty more than one year ago. Grounded Theory was applied to analyze the data.

#### Results

All participants experienced a kind of elation so that the “feeling elated” constituted the core concept of the analysis. This feeling was reported to be experienced by all individuals through two main ways including “removing perceived defect” and “having expected beauty”. Furthermore, the main process of Rhinoplasty took place in three stages including preoccupation, inquiry, and operation.

#### Conclusions

The present study had some recommendations to the professionals so that some individuals who prefer the Rhinoplasty should be referred to the psychologist based on some criteria which are mentioned in this study. According to our findings, usually, people from the HEB group need to psychological consultations rather than surgery.

**Keywords:** grounded theory, Iran, rhinoplasty, qualitative study.

### 1. Introduction

Cosmetic Rhinoplasty refers to any type of plastic surgery for nasal reconstruction or cosmetic purposes (Zahiroddin et al., 2008). It is the most common cosmetic surgery in Iran so that it has the first rank in the world with about 180 cases per 100000 populations (Loghmani et al., 2017). Low cost and advanced procedures of the surgery (Motamedi et al., 2016), Islamic dress code which is resulted in only face exposure (Mianroodi et al., 2012) and some psychosocial problems such as body dysmorphic disorders, dissatisfaction with body image, low self-esteem and so on (von Soest et al., 2009) are the main reasons for such action which has been mentioned in previous studies. Studies show that cosmetic surgeries are on the upswing while 60 percent of applicants do not need to undergo aesthetic surgery (Yarmohammad Touski., 2015).

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The primary stimulus for individuals to undergo rhinoplasty is more satisfied with their own appearance and improving their psychosocial functioning (von Soest et al., 2009). Several studies have demonstrated that rhinoplasty may improve quality of life (QoL), self-esteem, body image and social interactions (Esteves et al., 2017). A study showed that cosmetic surgery improves body image and self-esteem but it does not have any effect on psychological problems (von Soest et al., 2009). A preliminary study showed that the severity of body image distress may negatively impact on satisfaction with the outcome of the surgery (Di Mattei et al., 2015). A qualitative study in Iran focused on paradigm models to explain conditions, processes, and consequences of Rhinoplasty among the participants (Pournasiri, 2016) but it did not present a deep understanding from the studied phenomenon to explore the core concept so that it focused only on some general categories. Findings from some studies show that there is no relationship between Rhinoplasty and socio-demographic factors except the gender that shows females have more intend to undergo Rhinoplasty because of some reasons like beauty, stay in fashion, show off and so on (Mianroodi et al., 2012).

Iran is located in the Middle East with approximately 80 million inhabitants according to the last census in 2016 (Soltaninejad, 2017). Based on religion and custom, Iranian people should cover their bodies and hair and only can expose their face. Accordingly, some studies argue that women in Iran are more sensitive on their faces which is resulted in reduced preoccupation on the other parts of the body and more intention to cosmetic surgery on the face (Zakeri et al., 2017). Although it seems that Rhinoplasty is necessary for some cases, the high prevalence of that indicates that most operations are not necessary which is resulted in later frequent operations and or a lot of side effects (Yarmohammad Touski., 2015).

Although there have been several quantitative studies of Rhinoplasty and its role in increasing self-esteem, improving body image, quality of life and social interactions (von Soest et al., 2009; Di Mattei et al., 2015; Moghadam et al., 2018; Naraghi et al., 2016) there is a lack in qualitative studies especially in Iran (Pournasiri, 2016). Achieving a deep understanding of the phenomenon from the subjective perspective of the participants and exploration of underlying trends is the main purpose of grounded theory while the current studies show a gap in this field. They mentioned only a series of categories in a static state without a comprehensive expanding the properties and dimensions of the categories in the form of a process.

The aim of this research is to provide a deep understanding of the Rhinoplasty phenomenon. Therefore, the research questions are: how is the experience of individuals who undergo Rhinoplasty? What are the mechanisms and process of Rhinoplasty? How can prevent unnecessary Rhinoplasty?

## 2. Materials and methods

The study was conducted in the state of Kerman which is located in the southeast of Iran. Theoretical sampling was applied among individuals who referred to ENT or aesthetic clinics or by introducing medical specialists and people who knew such individuals. Inclusion criteria included people who underwent Rhinoplasty for more than one year. Constructing grounded theory by observing maximum and minimum contrast and variation in the sample ensured both developments of properties and dimensions of categories and identification and a better understanding of the phenomenon's processes (Charmaz, 2014).

First of all, a woman who was eligible according to the inclusion criteria was interviewed based on a semi-structured interview by using an interview guide. The interview was done in a calm room without any disturbing factor by a trained interviewer. The interviewer played no role in the treatment process, nor was she a member of data analysis. Each interview initiated with a narrative question such as, "would you please tell me about your experiences with Rhinoplasty?" the interviewer allows the participant to explain her thoughts, feelings, believes and everything else. Then, other questions were posed according to the interview guide. The interview was audiotaped and transcribed in order to start data analyzing. Getting a general understanding of the manuscript required several times reviewing. The initial coding was conducted by using gerunds in order to stick to the data and identify processes. After that, the primary categories and processes and also new questions were derived from the data. Based on this, the characteristics of the next interviewee were identified and some new questions required asking the first participant again. To explore latent aspects of the phenomenon an interview was done with a case that had not well-

proportioned nose but she did not intend to undergo Rhinoplasty. As the interview proceeded, constant comparative method and asking questions from the data (Glaser, Straus, 1967) established analytic distinction and helped to detect the main properties and dimensions of each category. MAXQDA software helped the author to analyze and edit qualitative data. Thus, the primary categories with the same content were further categorized to form a set of relevant topics. In a focused coding process, most analytic or frequent codes were used to facilitate the axial coding process. Here, the core concept and most relevant categories in a dynamic sense were derived from the initial codes gradually. The relating core concept, main categories, and sub-categories in a coherent dynamic sense took place in the axial coding phase. The interviews continued until data saturation, development of main properties and dimensions of the phenomenon as well as variations and processes (Corbin, Straus, 2014). Finally, saturation occurred after 16 interviews. The arithmetic mean of interviews was 48 min duration.

#### Trustworthiness

Deviant case analysis and using referential adequacy ensured credibility. A transparent description of research steps confirmed conformability. Supporting of interpretations and findings by the data by using a researcher not involved in the research process approved dependability.

#### Ethical considerations

The ethics committee of Kerman University of medical sciences approved the study with the reference number of 96001040. Interviewees participated in this study voluntarily and verbal information was given to them according to the interview guide. Voice of the participants was recorded with the permission of them and the interviewer explained to participants that they can exit from the study any time they want. Also, the interviews were performed using a number-based identification method.

### 3. Results

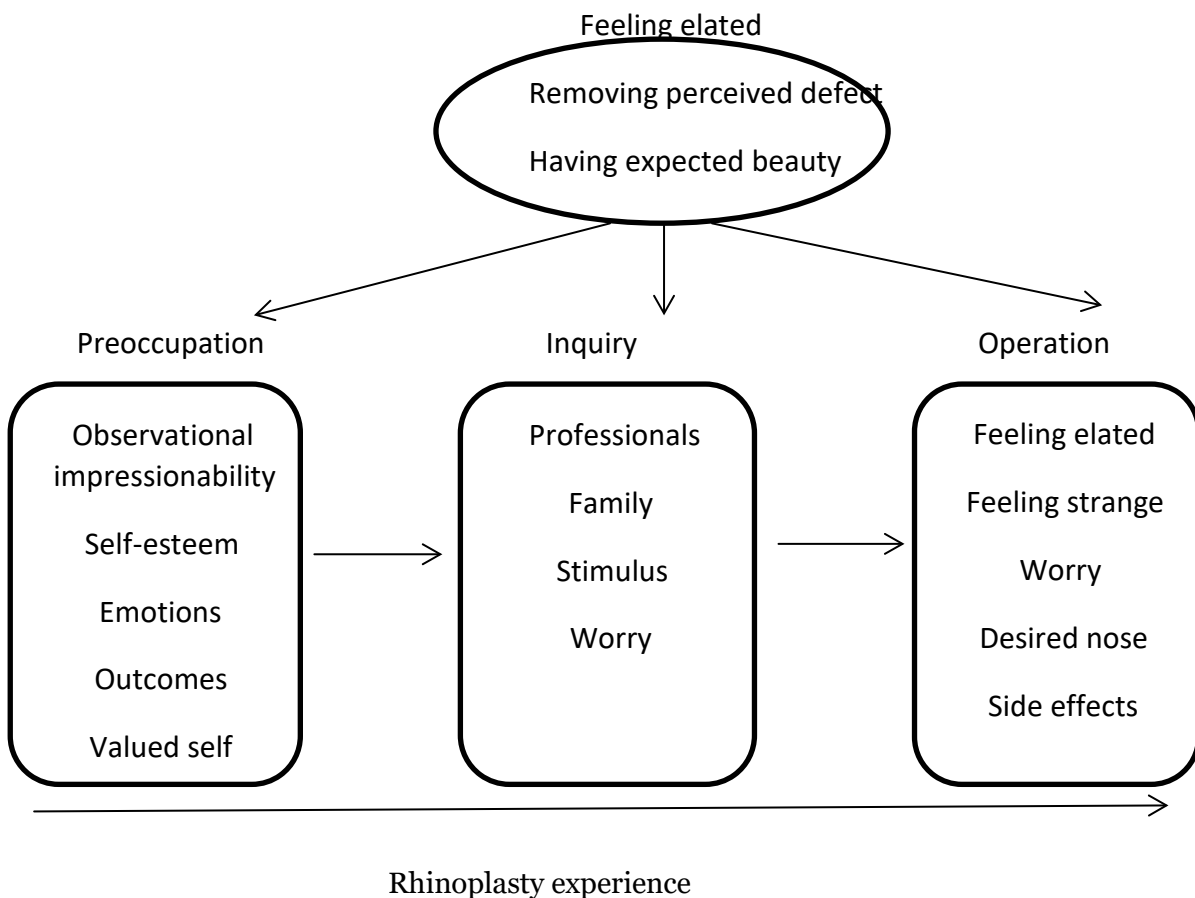
All 16 participants met the inclusion criteria as formulated. The socio-demographic characteristics of the participants are shown in Table 1.

**Table 1.** Socio-demographic characteristics of the participants

Participant number	gender	age	Marital status	Employment status	Income in year (€)	Type of surgeon	Time since Rhinoplasty (years)
1	Female	38.0	Married	employed	7500	ENT	1.0
2	Female	22.0	Single	unemployed	0.0	ENT	1.5
3	Female	33.0	Married	employed	1750	ENT	5.0
4	Female	32.0	single	employed	3000	Cosmetic surgeon	6.0
5	Female	25.0	Single	employed	3125	ENT	3.5
6	Male	24.0	Single	employed	2500	Cosmetic surgeon	1.5
7	Male	28.0	Married	employed	5000	ENT	1.5
8	Male	20.0	Single	unemployed	0.0	ENT	1.5
9	Male	24.0	Single	employed	8750	Cosmetic surgeon	4.0
10	female	24.0	Single	employed	2500	-----	----
11	male	36.0	Married	unemployed	1800	ENT	3.0
12	male	21.0	Single	unemployed	0.0	Cosmetic surgeon	2.0
13	female	46.0	Married	employed	3200	ENT	12.0

14	female	23.0	Single	unemployed	0.0	Cosmetic surgeon	3.0
15	female	32.0	Married	employed	2600	ENT	6.0
16	male	25.0	Single	unemployed	0.0	Cosmetic surgeon	2.0

Most of the individuals who underwent Rhinoplasty experienced a kind of elation resulted from a change in their face which was named, “feeling elated”. This feeling was reported to be experienced by all individuals through two main ways including “removing perceived defect” and “having expected beauty”. Furthermore, the main process of Rhinoplasty took place in three stages including preoccupation, inquiry, and operation. In figure 1, the experience of Rhinoplasty has been shown.



**Fig. 1.** The experience of Rhinoplasty

**Preoccupation stage**

This stage has some properties which are different between the two aforementioned groups. Those are listed below.

**Observational impressionability**

Both people who intend to remove a defect that had been perceived in their nose (RPD) and people who intended to have expected beauty (HEB) are impressed by observing the frequencies and results of operations that have been done by others. The participant Nr. 5 stated, “In recent years, there is a lot of Rhinoplasty in our country thus, I had a sense that I should do Rhinoplasty. That is so. It means the effect of people who did Rhinoplasty was not a few.”

**Self-esteem**

One of the main reasons that occupied the mind of individuals to undergo Rhinoplasty was a lack of self-esteem. Approximately all individuals in the two groups had some complaints regarding

the lack of self-esteem and social interactions. It seems that the men who underwent the Rhinoplasty had lower self-esteem in comparison with the women because all men from two groups indicated the lack of self-esteem while it was more evident among the women who intended to have expected beauty. The participant Nr. 3 expressed, "I did not like my nose form and it had been caused that my self-esteem goes down."

#### Emotions

Associating emotions with beauty was one of the important distinguishing factors between two groups so that the HEB group associates the beauty with some emotions such as feeling happiness or depression while the RPD group has not such attribution. A man participant declared, "My nose had affected my morale so that I felt depressed. Every time I thought about my nose. I was so irritable. If anyone joking with me, I would get upset soon."

#### Outcomes

A participant was not going to undergo Rhinoplasty despite not having a well-proportionate nose. One of the main reasons for her was the outcomes of the operation. She said, "I do not think about my nose a lot. If people give me a comment about my nose and doing operation maybe I thought about that for a moment and say to me, no, for a nose, it does not worth undergoing anesthesia... I think about how people are satisfied to do an elective operation despite a lot of risks. I never accept this risk."

#### Blemishing valued self

It is related to the participant who did not intend to do Rhinoplasty. The participant Nr. 10 stated, "I coped with my face. I like myself rather than change it... I think people who undergo Rhinoplasty are like several fruits that transplant to each other and finally, it is changed into strange fruit... I like myself and I like to stay such without any change."

#### Inquiry stage

##### Professionals and people who have already experienced Rhinoplasty

People who want to undergo Rhinoplasty usually inquire about the type of surgeon (ENT or plastic surgeon), quality of operation, financial costs, the shape of the nose (fantastic or natural), probable side effects, anesthesia situation, satisfaction after the operation and so on. Some of the people are ambivalent about doing the operation and the statements of the surgeon encourage them to do that. The participant Nr. 4 stated, "I felt fear and ambivalent about the operation. When I came to the doctor he told me that your nose is not so bad but if you want to do Rhinoplasty, I do it for you and I change it to the form that you intend. The form of doctor's statements was very effective on my decision so that I encouraged doing Rhinoplasty."

Concerning the shape of the nose, the HEB group usually intends to have a preconceived or fantastic nose while the RPD group wants to have a natural nose so that the defects are only removed. The participant Nr. 1 said, "When I went to the doctor I told him that pulls the tip of my nose up. I like the fantastic nose."

Regarding the type of surgeon, quality of operation and financial costs, the author could not find any difference between the two groups so that all participants had approximately a lot of inquiries about these issues.

#### Family

People who want to do Rhinoplasty sometimes have some challenges with their families. These challenges appear, especially in the inquiring stage. Some families disagree with the operation and declare that it is not a necessary operation and the side effects are more than advantages. But the interesting finding in this part is the differences between the two groups in the face of family satisfaction. The opinion and satisfaction of the family are important for the RPD group and it is important to persuade and make their families agreeable with themselves. While in the HEB group the counseling with the family and getting their opinion is not one of their priorities. A participant Nr. 9 stated, "The ... my family told me that for the boy every nose is good. Do not think so much about that. Operation is dangerous... when I found that after 18 years old can do the operation, I gathered my money and with the satisfaction of myself did the operation... In fact, I did not inquire the opinion of my family while I wanted to do Rhinoplasty."

#### Stimulus

It seems that the RPD group needs stimulus, accompanying or support for doing operation while the HEB group usually does the operation without any support. It is more evident by the

women in comparison with the men. Usually, the women from the RPD group seek support or stimuli like the family, friends, surgeon and so on to do the operation. The participants Nr. 15 expressed, “for a while, I was thinking about the Rhinoplasty but I was ambivalent about that.

When I spoke with my family and they did not oppose me, I decided to do Rhinoplasty.”

#### Worry

Although some worries exist in the preoccupation stage, most worries happen in the inquiry stage when the people encounter the comments of the professionals, family and other people who have already experienced Rhinoplasty and or observing some side effects of the people who underwent the Rhinoplasty. One of the considerable findings is regarding the differences between the two groups in terms of worry. Usually, the worries of the RPD group are more than HEB groups in terms of allergy, anesthesia side effects, duration of anesthesia, breathing problems while they worry of HEB group is more about the shape of the nose and immediate side effects such as inflammation, bruise and so on. Because of these worries, the duration of inquiry by the RPD group is more than the HEB group. The participant Nr. 12 declared, “...I was worried about breathing problems and allergy because I heard from a doctor maybe I encounter to some side effects like allergy or breathing problems after operation...”

#### Operation stage

##### Feeling elated

It was a ubiquitous statement of the people who underwent Rhinoplasty. Although some participants declare that it is not the shape that they expect or had some complaints about the side effects, they had a satisfaction feeling about the change in their faces. They acknowledged that the shape of their nose is better than before. The participant Nr. 8 expressed, “When I saw myself in the mirror, it was so good. I was satisfied with myself... I liked myself much more than before. I felt so happy...”

##### Feeling strange or different

It points to the feeling that some participants mentioned regarding the change in their faces. Some of them declared that they had a strange feeling for a few weeks after surgery. This feeling was mentioned much more among the RPD group in comparison with the HEB group. The participant Nr. 3 stated, “When I saw myself in the mirror for the first time I felt my face has changed completely... I felt strange... but this feeling removed gradually. When I saw my prior photos say to me (e) this is me?”

#### Worry

Like the worries before surgery, there were some worries after surgery. They were often about changes in the shape of the nose or some side effects in the future. According to the statements, it seems that the RPD group is more worried about future side effects and changing the shape of the nose in comparison with the HEB group. The participant Nr. 16 said, “I hope my nose is the same and no change happens in that because I saw a lot of noses that have changed after several years. I hope that does not happen.”

#### Desired nose

People, who intend a special form of the nose, state their dissatisfaction more probable from the nose shape after surgery. Sometimes they do several surgeries on their nose to get an expected nose. Our results show that the people from the RPD group usually are satisfied with the operation but some of the people from the HEB group are not satisfied and intend to do more operation in order to get the desired nose. The participant Nr.1 who did the second operation on his nose declared, “I was crying after the first surgery that why my nose is not fantastic. I did not regret the operation but I intended to be more fantastic. The doctor and my friends gave me consolation that after a few months it gets better... But it was no such a thing that I wanted. Again I asked the doctor and persisted on the repeated operation.”

#### Side effects

All participants had some complaints about short term or long term side effects and doing intensive care during recovery. They included feeling pain, feeling choked, breathing difficulties, headache, bruising, edema, feeling numb in the nose, feeling hanging in the nose, feeling weak and lethargic and so on. The participant Nr. 6 acknowledged, “Generally, it does not worth it. After several months some pains still exist. It is hard. You have something that if you did not operation, you did not have them. For example, I feel numb in my nose. Although my downward nose and breathing problem has been removed, I felt healthier if I did not operate. I always feel hanging in

my nose. The sense that I do not say how is it. You feel something has been attached to your nose and it is changing.”

#### 4. Discussion

To our knowledge, it is the first study that explores two main groups that undergo Rhinoplasty and introduce some properties for them. As our results showed although some of the participants were not completely satisfied with their nose shape, feeling elated and a kind of satisfaction was the ubiquitous feeling among all participants because apart from the nose shape they experienced a change in their face towards improving. In line with our findings, several studies confirmed that feeling elated and positive mood is the predominant consequence of Rhinoplasty (Von Soest et al., 2009; Vali-allah et al., 2016; Fathi azar et al., 2014). Also, our findings are inconsistent with a lot of studies that explored that Rhinoplasty has a considerable effect on self-esteem (Hosseinzadeh et al., 2016; Naraghi et al., 2016). Regarding the lower self-esteem of men who undergo Rhinoplasty in comparison to women which was mentioned in our study, a study showed a significant difference between men and women so that the men had lower self-esteem (Hosseinzadeh et al., 2016). A study that investigated the role of social and familial factors in Rhinoplasty showed that mass media especially satellite, family and being recommended by others who underwent Rhinoplasty were the most important factors in stimulating individuals to do Rhinoplasty. It is in accordance with our findings that indicated observation had a primary effect on deciding to do Rhinoplasty (Yarmohammad Touski, 2014; Memarian et al., 2014).

The most striking finding in the current study was identifying two main groups (HEB and RPD) who underwent Rhinoplasty. Distinguishing between these two groups mostly happened through differences between their emotions and the similitudes that they applied. HEB group mostly likened the Rhinoplasty to some emotional statements such as a gift from God and intended to attribute the improvement in moral status to the beauty and changing in their face. The linked psychological problems to beauty while the studies indicated that the level of psychological problems does not change after surgery (Von Soest et al., 2009). A more interesting finding was about preoccupation. The person who did not intend to undergo Rhinoplasty did not have any preoccupation regarding that and the preoccupation of the RPD group was significantly less than the HEB group so that a participant likened the Rhinoplasty to a half-finished work that must be finished. Also, it seems that people who consider changing in face equal to change in self-concept and blemishing valued self does not intend to do Rhinoplasty. It is inconsistent with the studies showed that the Rhinoplasty has no effect on self-concept (Gulbas, 2013; Vali-allah et al., 2016). An explanation is that studies compared the participants in terms of pre and post-operation while in our study the person who believed Rhinoplasty can affect his self-concept did not intend to undergo Rhinoplasty. Further studies in a quantitative manner should investigate this issue.

One of the findings of the present study was the need for support and accompanying of professionals or family by the RPD group in comparison with the HEB group. One reason is because of ambivalent feeling and the degree of worries that is more by the RPD group. In fact, they need to feel confident about their decision and outcomes of the surgery. Thus, they resort to the professionals and their families to get support and accompanying them. It is clear that the RPD group is more worried about the surgery and its side effects. Apart from the amount of worry, the type of that also is different between groups. So that the RPD group is more worried about side effects that are not necessarily related to the nose and predominantly related to the other part of bodies such as breathing problems, anesthesia, and allergy. On explanation is that they are more intending to see Rhinoplasty in a logical way. That is why the duration and type of inquiry are more prominent by them.

All in all, based on the results of the present study professionals and families can prevent unnecessary operations considering the following points. Also, there is a need for psychological consultation instead of Rhinoplasty especially for individuals from the HEB group.

First, the attribution of beauty to the mood is a key point. Whatever this attribution is more powerful, the professional like surgeon should be more cautious about doing surgery. Secondly, having a special form of the nose also is an important issue so that these people also are individuals with a high-risk operation in terms of satisfaction after surgery. This addresses some statements so that some people declare that they want to be like a specific person or having a fantastic nose. Third, people who feel ambivalent about the operation usually need to support, stimulus and

accompanying from the professionals, friends, and family. In fact, to these people, if they do not have any comorbid problems like breathing problems, fractures and so on, it is better to be given awareness about side effects and professionals try to dissuade them from the operation. Forth, attention to the type of worries is important. Usually, the kind of worries by the people who are more proper for the operation is not just on the nose. They have some worries about breathing problems, kind, and duration of anesthesia, allergy and long term side effects while the worries of people who are risky are usually concentrated on the immediate and short term side effects such as edema, bruising, headache and so on.

One of the limitations of the present study is about transferability. As the current study conducted in a confined social and cultural network with a small sample size, a similar project with a qualitative method in different societies and cultures should be conducted to prove the transferability of the findings. Also, five of the 16 participants were recruited via the medical staff. Although this limits the transferability and credibility of the findings, by observing the heterogeneity in the sample size, the authors tried to increase credibility.

## 5. Conclusion

Results of the study demonstrated that the Rhinoplasty has a three-stage process including preoccupation, inquiry, and operation. The core concept was feeling elated which is made through removing the perceived defect (RPD) or having expected beauty (HEB). According to our findings, usually, people from the HEB group need to psychological consultations rather than surgery.

## 6. Conflicts of interest

The authors report no conflicts of interest.

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