

Rhinoplasty, A Powerful Tool to Boost Patient's Self-Confidence

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ABSTRACT

Objective: To determine the Rhinoplasty as a powerful tool to boost patient's self-confidence. **Study Design:** Prospective study. **Settings:** Islamabad cosmetic surgery and department of plastic surgery PIMS Islamabad Pakistan. **Duration:** From October 2019 March 2020. **Methodology:** All the patients underwent rhinoplasty having age 18 to 50 years and wither of gender were included. Rhinoplasty outcomes Evaluation (ROE) questioner containing (6 questions, was used to assess improvement of patient's self-confidence. All the data was recorded by study proforma. Data was analyzed by using SPSS version 20. **Results:** Total 51 patients were assessed; their mean age was 28.54±6.65 years. Male were 27(52.9%) and females were 24(47.1%). After 3 months postoperatively patients were assessed, according to (ROE) questioner. Almost all the patients were completely agree with the appearance their nose, they can completely breath and feeling very much and completely their friends and loved ones like their nose. All the patients were confident regarding their nasal appearance as it is the best that it can be and refused, when they were asked regarding that they want to alter appearance or function of their nose surgically. **Conclusion:** Rhinoplasty is the best tool to boost patient's self-confidence having nose common deformities. Almost all the participants were satisfied, good feeling and confident after surgery.

Keywords: Nose, Rhinoplasty, Satisfaction.

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INTRODUCTION

The nasal structure and anatomical arrangement are major factors of aesthetics and facial harmony.¹ The nose is one of the first facial features that humans register when observing another human face, and also lies between other prominent features, like our eyes and lips. The nasal anatomical arrangement and structure are major contributors of aesthetics and facial coherence.^{2,3}

Rhinoplasty was usually carried out and was among the most performed procedures of aesthetics.² A rhinoplasty patient's assessment is multidimensional and involves a nasal history, nasal airway assessment, and nasofacial performance analysis, which contributes significantly in selecting the best surgical procedure to accomplish improved aesthetics along with facial harmony.^{2,4} Particularly in case of plastic surgery, the assessment of surgical outcome determined by patient contentment or standard of living is highly crucial. Evaluation of self-reporting results of plastic surgery remains increasingly of interest.⁵

The surgeon in rhinoplasty must consider the various anatomical patterns that characterize ideal aesthetics around ethnocultural context. Skin thickness may be a significant factor influencing the outcomes of rhinoplasty. Thin skin may display recovered imperfections of the nasal frame; although, definition of the nasal structure is easier to achieve and can mask minor defects in thicker skin, yet limits the definition of surface contour following prolonged oedema and inflammation which can contribute to terrifying and undesirable aesthetics.^{1,6,7} Rhinoplasty is not an easy procedure.⁸

The surgery does not just aim at restoring the nose function and youthful appearance but as well to enhance the living standards. Over time the pattern has shifted rapidly from more invasive procedures to less invasive ones. Even Although the technical aspects of rhinoplasty are significant, the factor which determines the effectiveness of the procedure is patient's satisfaction.⁸ Current international and regional studies have suggested that this method require more training and education of surgeons in enhancing the outcomes of nasal deformity functional and aesthetic disabilities.^{8,9} Therefore this study has been conducted to evaluate the Rhinoplasty as a powerful tool to boost patient's self-confidence.

METHODOLOGY

Study Design: Prospective study.

Settings: Islamabad cosmetic surgery and department of plastic surgery PIMS Islamabad Pakistan.

Duration: From October 2019 March 2020.

Sample Technique: Non-probability consecutive sampling technique was used.

Sample Size: 51 patients.

Inclusion Criteria: All the patients underwent rhinoplasty due to nose common deformities having age 18 to 50 years, willing to participate in the study and wither of gender were included.

Exclusion Criteria: Patients with history of trauma to nose, coagulation abnormalities and congenital anomalies of face and nose were excluded from the study.

Methods: All the patients those fulfilling the inclusion criteria and willing to participate in the study, underwent rhinoplasty were studied for their self-confidence. Informed consent was

taken from each patient. The open rhinoplasty approach was done in all patients with the use of a septal cartilage graft, conchal cartilage graft, and rib cartilage in included patients. All the surgeries were done by senior surgeons having minimum experience of 10 years. A test Rhinoplasty Outcomes Evaluation (ROE) questioner was used, which was first created by Alsarraf R^{10,5,8} in 2000, to assess the measurements of qualitative aspects like as social, emotional and psychological variables with the reliability, internal consistency and validity for many plastic surgeries, including rhinoplasty. After complication of the questioner, data was recorded study proforma. All the data was analyzed by using SPSS version 20. Mean and standard deviation were calculated for numerical data. Frequency and percentages were calculated for categorical data.

RESULTS

Total 51 patients were assessed; their mean age was 28.54 ± 6.65 years with range of minimum 19 years and maximum 51 years. Male were 27(52.9%) and females were 24(47.1%). Table.1

Table 1: Age and gender statistics of patients n=51

Variables		Statistics
Age	Mean \pm SD	28.54 \pm 6.65 years
	Median	27.0 years
	Minimum	19 years
	Maximum	51 years
Gender	Male	34 (66.7%)
	Female	17 (33.3%)

After 3 months postoperatively patients were assessed, according to (ROE) questioner, and on 1st question, all patients very much and completely agree with the appearance their nose, mean score was 3.70 ± 0.54 .

On 2nd question almost all the patients were satisfied and they can completely breath by their nose, mean score was 3.78 ± 0.46 .

According to the 3rd question all the patients answered that they are feeling very much and completely their friends and loved ones like their nose.

When asked to the patients regarding their nose appearance, all the participants replied that there are no limits of social or professional activities by taking current appearance of nose, mean score was 3.76 ± 0.42 .

All the patients were confident regarding their nasal appearance as it is the best that it can be, mean score was noted as 3.86 ± 0.34 . All the study participants refused, when they were asked regarding that they want to alter appearance or function

of their nose surgically, mean score was seen 3.96 ± 0.19 , results showed in table.2

Table 2: Patients satisfaction according (ROE) questioner n=51

Questioner		Frequency (%)	Score (mean \pm SD)
1. How well do you like the appearance of your nose?	Not at all 0	00	3.70 \pm 0.54
	Somewhat 1	00	
	Moderately 2	1(3.9%)	
	Very much 3	11(21.6%)	
	Completely 4	38(74.5%)	
2. How well are you able to breathe through your nose?	Not at all 0	00	3.78 \pm 0.46
	Somewhat 1	00	
	Moderately 2	1(2.0%)	
	Very much 3	9(17.6%)	
	Completely 4	41(80.4%)	
3. How much do you feel your friends and loved ones like your nose?	Not at all 0	00	3.68 \pm 0.61
	Somewhat 1	00	
	Moderately 2	4(7.8%)	
	Very much 3	8(15.7%)	
	Completely 4	39(76.5%)	
4. Do you think your current nasal appearance limits you social or professional activities?	Always 0	00	3.76 \pm 0.42
	Usually 1	00	
	Sometimes 2	00	
	Rarely 3	12(23.5%)	
	Never	39(76.5%)	
5. How confident are you that your nasal appearance is the best that it can be?	Not at all 0	00	3.86 \pm 0.34
	Somewhat 1	00	
	Moderately 2	00	
	Very much 3	7(13.7%)	
	Completely 4	44(86.3%)	
6. Would you like to surgically alter the appearance or function of your nose?	Definitely 0	00	3.96 \pm 0.19
	Most likely 1	00	
	Possibly 2	00	
	Probably not 3	2(3.9%)	
	No 4	49(96.1%)	

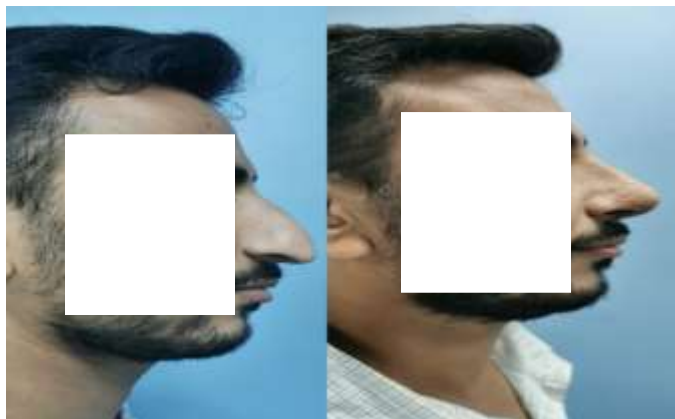


Figure 1: Before and after rhinoplasty

DISCUSSION

Nose has a great impact on the facial appearance of a person. The patients looking for rhinoplasty have been reported with several esthetic nasal anomalies.¹¹ Rhinoplasty is a widespread surgical intervention, which has a profound impact on the living standards of patients, the evaluations for which needs to be carried out correctly, either for research or therapeutic purposes.¹² Various questionnaires have been employed to evaluate RP patients' standard of living, including the quick and simple to administer ROE that has been applied in many research studies.^{12,13} In this study after 3 to 6 months postoperatively, almost all the patients were completely agree with the appearance their nose, they can completely breath and feeling very much and completely their companions and mates like their nose. All the patients were confident regarding their nasal appearance as it is the best that it can be and refused, when they were asked regarding that they want to alter appearance or function of their nose surgically. Similarly, Esteves SS et al⁵ reported that Significant statistical rise in ROE scoring following rhinoplasty, indicating high satisfaction index in this patient population and shifts in ROE values were also greater in patient with slow literacy, which could be attributed to lower pre-operative expectations as well as lack of knowledge and access to the internet. However, in this study mostly patients were educated. Khan N et al⁸ also observed that although rhinoplasty is a complex technique, it has demonstrated gains with respect to both esthetic and functional outcomes and the ROE questionnaire is a reliable strategy for assessing satisfaction of patients under study. In a study of Abianeh SH, et al¹⁴ also observed that Rhinoplasty satisfaction rates are high in Iranian population and are correlated with the natural appearance of nose, along with tip rotation.

In this study mean age was 28.54 ± 6.65 years and Male were 27(52.9%) and females were 24(47.1%). On other hand Paul MA et al¹⁵ found mean age 36.9 ± 18.4 years. Inconsistently Alharethy S et al¹¹ reported that out of the 248 patients females were more than males with mean age of 23 years, and they further reported that the preference for rhinoplasty is much more common among young subjects as compared to older ones. However, Pourdanesh et al¹⁶ documented similar outcomes

among study population in Iran, where 40% of male population was seeking rhinoplasty. On other hand Khan N et al⁸ also stated that females and males were 64.4% and 35.5% respectively with mean age 22.5 ± 2.6 years and 28.2 ± 2.8 years respectively. However, the gender difference may due to difference in sample size. Advancement in central rhinoplasty depends on concern for the patient's preference and motivation for rhinoplasty, assessment of the association of nasofacial components, assessment of subunits of nose to overall nose association, identification of anatomical variants, thorough surgical preparation and use of precise surgical procedure.¹⁷

CONCLUSION

Rhinoplasty is the best tool to boost patient's self-confidence having nose common deformities. Almost all the participants were satisfied, good feeling and confident after surgery. This best outcome also related to surgeons' interest, experience and their work quality including preoperative evaluation and treatment planning.

LIMITATIONS

Small sample size and single center study.

SUGGESTIONS / RECOMMENDATIONS

Larger sample size and multicenter studies should be done, this practice can be commonly used to solve the psychological and hesitation problems related to nose deformities.

CONFLICT OF INTEREST / DISCLOSURE

None.

REFERENCES

1. Brito ÍM, Avashia Y, Rohrich RJ. Evidence-based Nasal Analysis for Rhinoplasty: The 10-7-5 Method. *Plast Reconstr Surg Glob Open*. 2020;1;8(2):e2632.
2. Rohrich RJ, Villanueva NL, Small KH, Pezeshk RA. Implications of facial asymmetry in rhinoplasty. *Plast Reconstr Surg*. 2017;1;140(3):510-6.
3. Nouraei SA, Pulido MA, Saleh HA. Impact of rhinoplasty on objective measurement and psychophysical appreciation of facial symmetry. *Arch Facial Plast Surg*. 2009;11(3):198–202.
4. Rohrich RJ, Ahmad J. Rhinoplasty. *Plast Reconstr Surg*. 2011;128(1):49–73
5. Esteves SS, Gonçalves Ferreira M, Almeida JC, Abrunhosa J. Evaluation of aesthetic and functional outcomes in rhinoplasty surgery: a prospective study. *Braz J Otorhinolaryngol*. 2017 Oct;83(5):552-7.
6. Guyuron B, Lee M. An effective algorithm for management of noses with thick skin. *Aesthetic Plast Surg*. 2017;41(2):381–7.
7. Cho GS, Kim JH, Yeo NK, et al. Nasal skin thickness measured using computed tomography and its effect on tip surgery outcomes. *Otolaryngol Head Neck Surg*. 2011;144(4):522–7.
8. Khan N, Rashid M, Khan I, Sarwar SU, Rashid HU, Khurshid M et al. Satisfaction in Patients After Rhinoplasty Using the Rhinoplasty Outcome Evaluation Questionnaire. *Cureus*. 2019;11(7):e5283.

9. Lee MK, Most SP. A comprehensive quality-of-life instrument for aesthetic and functional rhinoplasty: the RHINO scale. *Plast Reconstr Surg Glob Open*. 2016;4(2):1-6.
10. Alsarraf R. Outcomes research in facial plastic surgery: a review and new directions. *Aesthet Plast Surg*. 2000;24(3):192-7.
11. Alharethy S, Aldrees T, Aljrid R, Alanazi A, Algaryan SK, Jang YJ. Common nasal deformities among rhinoplasty patients in a university hospital in Saudi Arabia. *Ann Saudi Med*. 2017;37(3):207-11.
12. Çelik M, Altıntaş A. The turkish version of the rhinoplasty outcomes evaluation questionnaire: validation and clinical application. *Balkan Med J*. 2019;36(2):129-33.
13. Bulut OC, Plinkert PK, Wallner F, Baumann I. Quality of life in functional rhinoplasty: rhinoplasty outcomes evaluation German version (ROE-D). *Eur Arch Otorhinolaryngol*. 2016;273(9):2569–73.
14. Abianeh SH, Bajestani SM, Rahmati J, Shahrbafe MA, Meybodi AF. Evaluation of Aesthetic and Functional Outcomes After Open Rhinoplasty: A Quasi-experimental Study by the Aid of ROE and RHINO Questionnaires. *Aesthetic Plast Surg*. 2020;3(1):1-7.
15. Paul MA, Kamali P, Chen AD, Ibrahim AM, Wu W, Becherer BE et al. Assessment of functional rhinoplasty with spreader grafting using acoustic rhinomanometry and validated outcome measurements. *Plast Reconstr Surg Glob Open*. 2018;6(3)e1615.
16. Pourdanesh F, Tabrizi R, Vahedi R, Mohajerani H. Ethnic rhinoplasty in Iranians: the oral and maxillofacial surgery experience. *J Oral Maxillofac Surg*. 2014;72(12):2568.1-7.
17. Eskandariou M, Motamed S. Evaluation of Frequency of Four Common Nasal Anatomical Deformities in Primary Rhinoplasty in A Tehran Plastic Surgery Center. *World J Plast Surg*. 2014;3(2):122-28.

AUTHORSHIP CONTRIBUTION

Abdul Khaliq	Drafting the work or revising it critically for important intellectual content
Zarish Daniel	Contribution in data collection
Naima Javed	Contribution in manuscript writing