

## Psychological health and expectations of patients seeking cosmetic rhinoplasty

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### Abstract

**Background:** Cosmetic rhinoplasty is now carried out increasingly in an attempt to solve the psychological and social problems of people who are discontent with their nose. Little is known about either the psychological status of persons who seek rhinoplasty or potential psychological changes following surgery. The challenge that faces surgeons, is how to identify, before surgical intervention those patients who may have a poor outcome in terms of psychological adjustment despite a technically satisfactory result.

**Methods:** A total of 96 patients (84 women and 12 men) who were seeking cosmetic rhinoplasty were selected and completed an adopted expectation questionnaire and SCL-90-R, a 90 item self-report symptom inventory which measures 9 primary symptom dimensions. It is designed primarily to reflect the psychological symptom patterns of psychiatric and medical patients.

**Results:** The majority of the patients reported that their noses made them self-conscious, and thought the rhinoplasty would change their lives. Interpersonal sensitivity and anxiety were the most reported symptoms in SCL-90-R, followed by obsessive-compulsive symptoms and depression.

**Conclusion:** The findings of this study enhance our understanding of psychological factors in seeking rhinoplasty and provide insight into the surgical-psychological management of these patients.

**Keywords:** psychological health, expectations, cosmetic rhinoplasty, SCL-90-R

### Introduction

Each year tens of thousands of persons undergo elective, cosmetic surgery to alter their physical appearance. In 1994 for example the American Society of Plastic and Reconstructive Surgeons (ASPRS) reported its membership performed more than 390000 cosmetic procedures, the most common including liposuction, breast augmentation, rhinoplasty and

rhytidectomy [1]. These procedures were undertaken to improve individuals' satisfaction with their appearance and presumably in many cases their psychological well-being including their self confidence and self-esteem [2,3]. Perhaps persons who seek plastic surgery intuitively grasp what social scientists have learned over the last four decades- that people associate physical attractiveness with numerous highly favorable personality traits including intelligence, competence and social desirability. Nev-

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ertheless, the social and cultural standards of beauty portrayed in the mass media are thought to directly influence the increasing demand for cosmetic surgery. The main reason for the ever-increasing demand for this type of plastic surgery is that physical attributes have come to be valued more and more highly in the modern societies [4]. But cultural pressure alone is not a sufficient explanation for the problem. Most people suffer from some degree of discontent with at least one aspect of their appearance. As much as 70% of nonclinical college students expressed dissatisfaction with a particular facet of their appearance [5,6]. A feeling of deformity according to Reich [7] is due to the fact that people have certain ideas about their body image. If the deformity is accepted by the family and affected person in is treated in a normal way, it will have little emotional impact on her/him [8]. This problem must be seen as an interaction between cultural influences setting norms and individual psychological factors.

Remarkably little is known about either the psychological status of persons who seek cosmetic surgery or potential psychological changes that may occur after surgery. Most people seeking cosmetic surgery procedures appear to psychologically healthy; however some are not and for these individuals cosmetic procedures may have a negative outcome, creating problems for both patient and surgeon [9].

The majority of the psychological literature on cosmetic surgery patients have been the product of collaborations between plastic surgeons and psychiatrists or psychologists. They have reflected surgeon's interest in identifying patients who are psychologically inappropriate for surgery. Most studies that relied on clinical interview reported significant psychopathologic problems in people with cosmetic surgery. Studies that used standardized tests to assess psychopathology of treated people generally have reported less disturbance as compared with the results of clinical interview investigations [1,4,10,11].

Esthetic rhinoplasty is now carried out increasingly by plastic surgeons in an attempt to solve the psychological and social problems of people with deformed noses. The early articles on the psychology of rhinoplasty patients were written by psychoanalysts or by psychiatrists, strongly influenced by psychoanalytic theory.

The central thesis of psychoanalysts was that concern about the nose serious enough to lead to the wish for an operation was almost always a symptom of some deeper psychic conflict. Surgical removal of the "symptom" (the nasal deformity) would be like removing a psychological crutch that had been supporting a frail and damaged psyche [11]. The published studies of rhinoplasty patients showed the rhinoplasty patients to be significantly more disturbed and rhinoplasty patients have long been considered to be psychologically unstable and therefore a "risky" group upon which to operate [12]. Warning have been issued about male patients, patients older than 35 years wishing striking surgical alterations, and those whose dislike of their noses is of recent onset [2,11]. The challenge that surgeons face is how to identify, before surgical intervention, those patients who may have a poor outcome in terms of psychological adjustment despite a technically satisfactory result.

These studies that make up the corpus of information about the psychology of rhinoplasty patients, influenced the design of this study and our search for knowledge about psychological health and expectations of these patients. By "psychological" we refer to the current emotional state of the patients. Our focus in the current study is on preoperative measures of psychological functioning. Finally we presented some screening questions that might aid cosmetic surgeons in identifying individuals who appear at high risk for elective cosmetic procedures.

## Methods

This was a descriptive cross-sectional study

conducted on 102 consecutive patients (89 women, 12 men) who sought cosmetic rhinoplasty and were admitted at the ENT clinic of a general hospital. The age range of the patients were between 18- 46 ( $M=27$ ,  $SD=3.53$ ) and all agreed to participate. Patients were included in the study if they were seeking rhinoplasty for the first time, had no history of psychiatric disorders and were over the age 18. They were excluded if the surgery was to correct defects resulted from trauma or disease or they were suffered from a personality disorder or possible body dysmorphic disorder (BDD) [all measured by chart review and initial psychiatric interview by a senior psychiatry assistant]. In the screening stage of the study, 6 patients with possible BDD and personality disorders were excluded from the study to leave 96 participants (84 women, 12 men) with no medical or psychiatric pathology. Data were collected by interview, an adopted 5-point attitude questionnaire [11] designed to obtain information about patients' concerns and expectations (the desired physical change, anticipations that the operation would affect interpersonal relations or be a life changing and effects on self-confidence and self-esteem), and SCL-90-R questionnaire as a standard preoperative psychological test. SCL-90-R is a 90 item self-report symptom inventory [13] designed to reflect the psychological symptom patterns of psychiatric and medical patients. Each item of inventory is rated on a 5-point scale of distress ranging from "not at all" at one pole to "extremely" at the other. The items are scored and interpreted in terms of 9 primary symptom dimensions which are labeled: Somatization (SOM), Obsessive-compulsive (OC), Interpersonal sensitivity (IS), Depression (DEP), Anxiety (ANX), Hostility (HOS), Phobic anxiety (PHOB), Paranoid ideation (PAR) and Psychoticism (PSY). The original inventory has good psychometric properties. The reported diagnostic validity of the inventory in Iran shows high sensitivity and the test-retest reliability over one week ranged

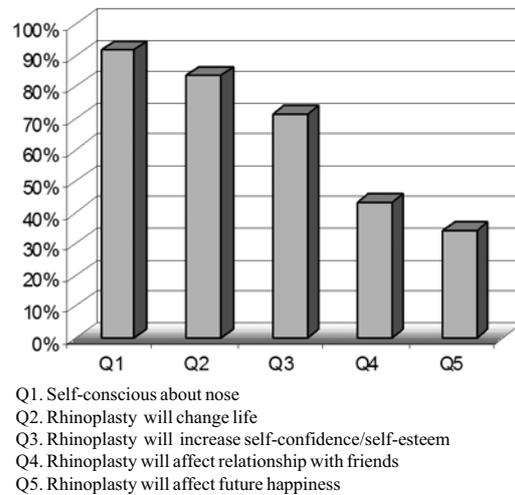


Fig. 1. Patients concerns & expectations (%).

from 080 to 097 [14]. Data were analyzed using SPSS.

### Results

92% of the patients reported that their noses made them self-conscious, 84% thought the rhinoplasty would change their lives, 71% expected it to affect their self-confidence and self-esteem, 43% anticipated it will affect relationship with friends and 34% believed that their future happiness would be affected (Fig. 1). Figure 2 shows that interpersonal sensitivity and anxiety are the most reported symptoms in SCL-90-R, followed by obsessive-compulsive symptoms and depression.

### Discussion

The results of this study confirmed the find-

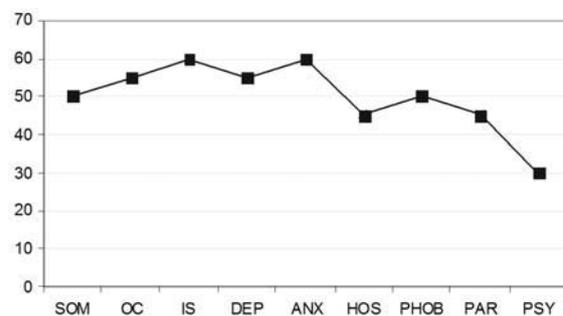


Fig. 2. SCL-90-R Symptoms profile.

ings of other studies about the effect of the appearance of nose to self-conscious, self-esteem, and self-confidence of those who believed that rhinoplasty would improve their lives. Studied participants believed that improvement in their appearance can alter the reactions of others in positive way. This is probably first seen by the patients in the reactions of strangers because first impressions are most affected by appearance. Long-term effects, particularly those occurring in friends and family members, are likely to be more influenced by “feedback” arising from the patients’ increasing self-esteem and self-confidence, which in turn lead to a more positive approach to life [15]. Because the literature suggests that unrealistic expectations regarding the outcome of the procedure may also predict a poor response, the surgeon should assess the patient’s expectations of both the proposed procedure and the desired outcome, for example if the person views the proposed procedure as a panacea that will solve all their life problems- ending their social isolation and saving a relationship- the specialist should be wary of performing the procedure [16]. Empirically based questions to assess unrealistic expectations for surgery do not exist and are greatly needed.

The results also showed that feeling of personal inadequacy and inferiority particularly in comparison with others, uneasiness and marked discomfort during interpersonal interactions and a set of symptoms and signs that were associated clinically with high levels of manifest anxiety. Characteristic symptoms of the study participants were nervousness and tension with cognitive components, feelings of apprehension, dread, somatic disorders, and anxiety. Those who undertook a rhinoplasty with a high level of preexisting anxiety were the most vulnerable to psychological injury. Very likely the patients expressed their anxiety and depressive feelings in terms of concern about the operation result. During the preoperative period, patients may be filled with unexpressed or unclearly ex-

pressed concerns about outcome, the reactions of others, and psychological adjustment to a new body image. The “typical” cosmetic surgery patient experiences moderate self-consciousness, social inhibition, anxiety and depression [1,11, 17]. Because a number of studies have identified a history of depression or anxiety as predictors of poor surgical outcome [2] an understanding of these facts will help surgeons and their staffs to deal appropriately with such concerns by the application of those good medicines, support and reassurance.

As part of the screening process, the surgeon should also attempt to determine whether the patient has body dysmorphic disorder. Indeed studies indicate that 7 percent to 15 percent of patients seeking cosmetic surgery have the disorder [18,19]. Diagnosis of the most common preoccupation in BDD (which is the nose [20]) requires questioning about the amount of time spent each day worrying about the appearance problem, the distress caused from the perceived flaw, and the concern of behavioral consequences (for example, social avoidance). If the patient reports being preoccupied with the perceived appearance flaw (for example thinking about it for at least an hour a day) and if the concern causes significant distress or impairment in functioning, body dysmorphic disorder may be present. Similarly, if the cosmetic surgeon perceives the patient’s problem as being much more trivial than the patient perceives it to be, this should arouse suspicion of body dysmorphic disorder. Our results showed that 6 patients (5.8%) who sought cosmetic rhinoplasty suffered from Body Dysmorphic Disorder preoperatively and they excluded from study.

Several predictors of poor outcome do emerge from literature, suggesting that surgeons should be cautious in performing cosmetic procedures on individuals with these characteristics. Further research is needed to assist surgeons in better identifying before surgery those individuals at increased risk for a poor outcome. Such studies should use stan-

standardized screening questionnaires, postoperative assessments and utilize a prospective design.

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