



A Review of the Effect of Rhinoplasty Surgery on Quality of Life

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Abstract

Rhinoplasty can affect both the quality of life and health-related costs. Therefore, considering the uncertainty in the consequences of rhinoplasty on the quality of life, or considering the high prevalence of this procedure and its cost burden, the purpose of this study is to determine the effects of rhinoplasty on the quality of life. In this study, a comprehensive search was conducted in Web of Science, PubMed, and Scopus databases using specific keywords. All studies conducted by the authors from the beginning of 2000 to the end of 2022 on the quality of life of people after rhinoplasty were extracted. It seems that there are problems such as low self-confidence, consumerism, fashionism, and the inability of reference groups to create religious and national identities on the one hand, and the desire to generate large incomes for specialists in this field on the other hand. Therefore, control of this phenomenon requires more education in society in the field of self-knowledge and human values, and to control the induced demands in the field of beauty procedures by beauty experts, stricter rules should be applied by the health authorities. Finally, combining the goals of providing beauty and health in a process that is referred to as cosmetic nose surgery, due to its multi-dimensional nature, creates a complex problem that requires the detailed and comprehensive analysis of the cooperation of various specialists, including psychiatrists, surgeons, insurers, etc.

Keywords: Rhinoplasty, Quality of life, Self-confidence, Consumerism, Fashionism.

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Introduction

With the development of medical knowledge and technologies during the 20th century and in the early years of the 21st century, human societies, especially the advanced Western world, witnessed extensive and important developments and trends in the approaches and strategies related to understanding the definition, classification, and management; it has been human issues and experiences (1-3). In the past century, more than ever before, people have witnessed the expansion of the territory and authority of medical definitions to other fields. Sociologists have called this structural process related to litigation activities as medicalization (2-4). According to sociologists, medicalization shows the processes through which a significant number of subjects, events, and human characteristics and issues (such as aging, reproduction, alcoholism, and beauty) that were once

considered normal or in the fields and Non-medical sciences were defined, categorized and managed, entered into the domain of medical authority or confiscated for the benefit of medicine. The collective form of medicalization has changed the social realm of health and illness in the past half century, and medicine has increasingly spread to different areas of our normal and everyday lives (5-7).

Today, cosmetic surgeries have become one of the medical issues and the demand for them has increased dramatically in all countries and has provided a very prosperous market for plastic surgeons and ear, nose, and throat surgeons; especially since the payment for it is out-of-pocket and insurances do not cover its costs. Such practices have caused a significant share of household health and treatment expenses to be allocated to them; if it may not be part of the priority of health needs (8-10).

Cosmetic surgery of the nose or rhinoplasty has a very long history in the world and has been greatly welcomed in recent years; So according to some experts, performing this surgery is out of the ordinary. At first, rhinoplasty was performed only for nose repair cases, but following the change in lifestyles and luxury, this surgery has been given more attention to changing the appearance of the nose and beauty (7, 11).

Many analysts call the tendency towards beauty procedures a form of fashionism. Nose cosmetic surgery, while having exorbitant costs that are paid based on unrealistic tariffs, attracts many young people and even teenagers, even in some government centers, such surgeries are performed, which themselves cause the treatment process has deviate from the main path. It can be said that the eyes and eyes have increased the desire to perform nose and face cosmetic surgery and it has turned the nose cosmetic surgery into a type of prestige (social position). In addition, in many media, there are always advertisements for cosmetic surgery, especially nose surgery, which encourages some people to perform these procedures. Mouth-nose, irritation of others, and personality deficiencies can also fuel its high demand. Another factor for this increase could be the lack of supervision in this field of treatment; this weakness in supervision has caused the beauty market to heat (12-14).

But at the same time, it is stated in many studies that people who have an ideal psychological condition have been able to reduce social disturbances, distress, sensitivity in interpersonal relationships, and increase self-confidence by performing nose surgery (12, 15-17). Self-confidence and self-worth change proportionally and with changing situations and circumstances, and many studies have determined that there is a very strong connection between the level of self-confidence and beauty practice. Improving the appearance has had positive effects on the psyche and improving the quality of life (18-23). Therefore, it is not possible to look at beauty practices from one dimension, and their effects on people's lives must be obtained, so that decisions can be made about their consequences and the license for their excessive expansion (19, 24-26). The tool that can be used in this field is the quality of life. Based on the different opinions about the quality of life, there is no comprehensive and uniform definition for it; According to the definition of the World Health Organization, quality of life is people's understanding of their position in life in terms of culture, expectations, standards and priorities. It is therefore purely subjective, invisible to others, and predicated on one's comprehension of various facets of existence. The concept and dimensions of assessing quality of life should be precisely established in every study project, in accordance with the World Health Organization's definition (27-31). From this point of view, it can be said that many factors affect the quality of life in rhinoplasty. For example, social support which includes: acceptance and acceptance by friends and family, social and occupational conditions of the person, self-confidence, satisfaction with appearance and desire to change appearance, etc. are among the most important factors, or physical health such as maintaining or improving the condition Breathing will play a significant role in a person's attitude about the quality of life. Each of these dimensions can have different effects on the quality of life. For example, people like Klassen *et al.* and Alsaraf state that the quality of life increased from 37% to 48% with a rhinoplasty operation (32-35). It is refuted by other studies, like Papadopoulos *et al.*, that rhinoplasty improves quality of life (36, 37).

On the other hand, in addition to the effects of rhinoplasty on a person's quality of life, they also bring costs. Some of these costs are directly imposed on the individual and others indirectly; direct costs are easily visible and calculated; but to determine indirect costs, one of the methods used in health studies is the human capital approach; this method calculates indirect costs based on current and future incomes that a person loses as a result of illness. The achievements of each person are determined equal to the income at the market price at the time of calculation. In addition, indirect costs are generally weighted based on the degree of disability. Here, disability refers to a situation in which a person is cared for at home due to illness and loses the income he could have earned at this time (38, 39).

According to the above, rhinoplasty can affect both the quality of life and health-related costs. Therefore, considering the uncertainty in the consequences of rhinoplasty on the quality of life, or considering the high prevalence of this procedure and its cost burden, the purpose of this study is to determine the effects of rhinoplasty on the quality of life.

Materials and Methods

In this study, a comprehensive search was conducted in Web of Science, PubMed, and Scopus databases using specific keywords. All studies conducted by the authors from the beginning of 2000 to the end of 2022 on the quality of life of people after rhinoplasty were extracted. Only prospective studies and studies in which the quality of life before and after rhinoplasty was examined were included in the study, and duplicate and unrelated cases were excluded.

Results and Discussion

Even though rhinoplasty was originally developed for the repair of fractures, bruises, and congenital problems, it is now widely used in the field of beauty. This phenomenon has been welcomed all over the world due to perhaps the innate need for beauty and currently has many fans. The expansion of nose plastic surgery to be more beautiful, on the one hand, drives up the price of health care significantly, but it also has the potential to have unwarranted and detrimental effects on health. Complications from this kind of surgery include included respiratory issues, snoring during sleep, etc. Carrying out these operations has also improved people's quality of life. For example, Litner *et al.* and Klassen *et al.*, who used the DASS9 questionnaire, and Chauhan *et al.*, who used the GBI questionnaire to collect data, concluded in separate studies that the quality of life after rhinoplasty has improved significantly (32, 40-42). However, studies by Papadopilons *et al.*, Ercolami *et al.*, and Sarwer *et al.* reject this hypothesis that rhinoplasty has a positive outcome on quality of life (36, 43, 44). Harris and Carr also stated in their study that only the self-awareness score of appearance was high (19, 45). In their study, Zahiroddin *et al.* declare external stimuli as factors that increase the demand for rhinoplasty (46). The observed differences can be caused by the different communities studied, the tools used the number of samples studied, or the period after the operation.

As the findings of the research showed, the quality of life of the research community after the surgery has decreased in the short term but has faced an increasing trend in the long term. Ercolami *et al.*, Sarwer *et al.*, and Chauhan *et al.* also showed in their studies that the satisfaction rate after rhinoplasty surgery increases with the increase of the elapsed time; This problem raises the complexity and multidimensionality of the quality of life and the variables affecting it on the one hand and the possible changes in the perspective and socio-economic status of the patients on the other hand (40, 43, 44, 47). In the process of time, fluctuations in social support and individual self-awareness can change and directly or indirectly affect the quality of life or the quality of plastic surgery. Conversely, the indiscriminate expansion of this type of surgery and its medicalization can cause significant financial harm to both customers and the health system, and on the other hand, it can increase the amount of medical errors in society; Since it may attract the attention of unqualified people to this field due to the high income it creates for the relevant specialists, and at the same time, due to the density of patients, it may reduce the quality of services of qualified people. In addition, because cosmetic procedures are not covered by any kind of insurance, it is important to check the number of people paying out of pocket for it using the human capital approach to estimate the total costs of cosmetic nose surgery, because this issue is from a planning point of view. Comparison of efficiency, price determination and priority determination in the country's policies can be important (48-50).

In explaining the contradictory findings and the findings of the present study regarding the quality of life and rhinoplasty surgery, it can be said that the quality of life is a multifaceted variable and as a result of various factors such as a good married life, intimate interpersonal relationships, good financial income, having social support, high self-esteem, academic success, and psychological health may be affected. Also, quality of life, as an indicator of a person's health status, is a multidimensional concept that refers to the subjective evaluation of various aspects of life, such as cognitive function and psychological well-being (36) and includes physical, psychological, social, and personal life environment aspects (51). Since rhinoplasty is not done to improve health but most of the time for cosmetic purposes, it may not only have an effect on the satisfaction of a person's life but also in some cases due to new physical problems caused by the surgery (including respiratory problems) can hurt the quality of life (4, 52). Each of these variables may have a different effect on the evaluation of a person's quality of life. Therefore, changes in different dimensions of quality of life require changes in different dimensions of the person, including personality, and beliefs, it is attitudes, and lifestyle that cosmetic surgery does not target any of these variables. Another dimension of quality of life is the social dimension, which is related to a person's ability to communicate with family members, neighbors, colleagues, and other social groups, job status, and economic conditions. Many people who apply for cosmetic surgery may complain about the quality or quantity of their social relationships. Much research has been done on the relationship between

self-confidence and cosmetic surgery, and the results of most of this research show that after cosmetic surgery, the level of self-confidence and self-esteem does not change much (2, 36).

Another important issue was psychological integrity. The concept of psychological well-being refers to various types of evaluations (positive and negative) of people about their lives, which include cognitive and intellectual evaluations (such as life satisfaction, job satisfaction, interests, and obligations) and emotional reactions to life events (such as pleasures, joys, sorrows, and longings). Psychological well-being has both emotional and cognitive components. People with high psychological well-being mainly experience positive emotions and have a positive evaluation of the events and events around them, while people with low psychological well-being evaluate their life situations and events as unfavorable, and most negative emotions such as anxiety, experience depression and anger (53). The undesirable spread of cosmetic surgeries in society and subsequently tying self-esteem, worth, happiness, and happiness to the beauty and fit of the face can be the result of internal conflicts and motivations of a person to deal with anxiety, feelings of inferiority, conflicts, and other problems. Be individual and interpersonal. Therefore, as a short-term and available strategy, instead of strengthening individual and interpersonal cognitive skills to create a rich and suffering-free life, people may turn to external factors, including artificial beauty such as rhinoplasty. In this way, the most visible layer of identity is so prominent that other dimensions of existence are marginalized. In other words, when a person cannot regain his sense of self-worth and self-esteem through adaptive strategies, he may target his appearance under the influence of negative and incorrect evaluations to regain his sense of worth and self-esteem. On the other hand, many conflicts that were wrongly considered as the result of these evaluations can be suppressed. Therefore, not only the quality of life may not increase in the long term, but also more psychological problems may occur (54, 55).

On the other hand, many people applying for cosmetic surgery are perfectionists. They tend to do their work in the best way and usually, due to high expectations, the results of things are not satisfactory for them, and the image they have of themselves is always more unfavorable than their real image. It is clear that in such a situation, beauty treatment will not improve the mental state of the person (49).

For many people who apply for cosmetic surgery, this is a strategic measure to deal with psychological issues and conflicts such as depression, anxiety, phobias, and various interpersonal problems. Even the possibility that these people suffer from psychological problems following negative evaluations of their appearance encourages them to overcome these feelings by changing their appearance. If any of these methods of evaluation are rooted in the deep psychological problems of the person, changing the appearance as a short-term strategy does not eliminate their general dissatisfaction. Another possibility that can be stated is that the mismatch of people's expectations and predictions before and after cosmetic surgery may be a reason for these results. Another possible explanation for these findings is that people change their physical and appearance status for various reasons (56, 57).

In general, due to the increase in cosmetic procedures and the increase in the use of cosmetics, examining the psychological issues related to these procedures can provide a clear way for those who decide to undergo cosmetic procedures.

Conclusion

As a general conclusion from this study, it can be emphasized that more than the need for rhinoplasty is being performed. It seems that there are problems such as low self-confidence, consumerism, fashionism, and the inability of reference groups to create religious and national identities on the one hand, and the desire to generate large incomes for specialists in this field on the other hand. Therefore, control of this phenomenon requires more education of the society in the field of self-knowledge and human values, and to control the induced demands in the field of beauty procedures by beauty experts, stricter rules should be applied by the health authorities. Finally, combining the goals of providing beauty and health in a process that is referred to as cosmetic nose surgery, due to its multi-dimensional nature, creates a complex problem that requires the detailed and comprehensive analysis of the cooperation of various specialists, including psychiatrists, surgeons, insurers, etc.

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