



Contents lists available at BioMedSciDirect Publications

## International Journal of Biological & Medical Research

Journal homepage: [www.biomedscidirect.com](http://www.biomedscidirect.com)



### Original article

# Awareness about rhinoplasty among health care professionals in a tertiary referral centre – a cross sectional study.

Tanthry Deepalakshmi <sup>\*a</sup>, Tanthry Gururaj <sup>b</sup>, Devan PP, Kavitha A, Bhandary Rukma

<sup>a</sup>Department of Otorhinolaryngology Head & Neck Surgery, AJ Institute of Medical Sciences, Mangalore-Udupi Highway, Kuntikana, Mangalore – 575004.

<sup>b</sup>Department of Anaesthesiology

#### ARTICLE INFO

##### Keywords:

*rhinoplasty*  
*Health care professionals*  
*Nodular lesion*  
*Skin lesion*

#### ABSTRACT

**INTRODUCTION:**The development of image awareness among people in recent years has led to tremendous advancements in the field of rhinoplasty. Health care professionals are the major source of guidance and referral to the general population. Hence a questionnaire based study was done to assess awareness about rhinoplasty among health care professionals.**MATERIALS AND METHODS:** This questionnaire based cross sectional study was done in AJ Institute of Medical Sciences, Mangalore, India. 60 female paramedical staff were given a questionnaire and the results were analysed. **RESULTS:** The age of the study group ranged from 20 to 29 yrs with a mean of 22.8+/-2.93. The educational qualification of parents was assessed. The study revealed that people undergo rhinoplasty for beauty, peer pressure and professional demands. According to 58, the major deterrents for undergoing rhinoplasty was fear for surgery, 2 financial constraints. 54 were well worsed with complications of rhinoplasty, 6 were not well informed. Among 54, 48 were aware of residual defect occurring after the procedure, 32 knew of peri orbital oedema, 26 thought of saddle nose as a complication and 12 considered pollybeak deformity. **CONCLUSION:** Despite the major progress in rhinoplasty there is a need to educate the general public about procedure and its complications. It is efficiently done by the health care professionals who reach out more to the general population than medical professionals. Hence a study was conducted among health care professionals to assess awareness about rhinoplasty.

© Copyright 2010 BioMedSciDirect Publications IJBMR -ISSN: 0976:6685. All rights reserved.

### 1. Introduction

People in today's world are more health conscious and aware of different medical specialities(1). Despite the tremendous advancements in the field of rhinoplasty, there seems to be a limited knowledge among the general public and health care professionals regarding the spectrum of rhinoplasty. Health care professionals like nursing and other paramedical staff reach more to the general population than the medical professionals. Hence, we have made a novice attempt to conduct a questionnaire based study among paramedical staff to assess attitude, perception and awareness about the procedure and complications of rhinoplasty.

### 2. Materials and Methods

This questionnaire based cross sectional study was done among the nursing and laboratory staff in AJ Institute Of Medical Sciences, Mangalore India. This is a 750 bedded multispeciality hospital which is a tertiary referral centre in this part of the country. Ethical clearance was obtained for the study. The inclusion criteria were:

1. The paramedical staff included nurses working in the out-patient department and opticians as well as the laboratory technicians.
2. Female staff members between the age group of 20 – 30 yrs were included.
3. Staff members who were either working in the hospital from past two years or who were permanent employees of the institute.

\* Corresponding Author : Tanthry Deepalakshmi  
205, Mamatha Residency,  
Anegundi 1st cross, Bejai  
Mangalore – 575004.  
+91 9480047494  
E.mail: [deepalakshmitanthry@yahoo.com](mailto:deepalakshmitanthry@yahoo.com)

The exclusion criteria were:

1. Staff members less than 20yrs and above 30 yrs of age.
2. Paramedical staff working in the wards and in pre and paraclinical departments.

60 staff members were randomly selected and were given a questionnaire including demographic information designed by the researchers. The content validity of the questionnaire was confirmed by expert opinion and its high reliability was confirmed by test-retest. The study was conducted in the month of June 2012 and the results were analysed as follows.

### 3. Results

#### 1. Demographic characteristics

The age of the study group ranged from 20 to 29 yrs with mean of 22.8 +/- 2.93. 52 (86.6%) were born in city of mangalore and 8 (13.4%) were from different parts of the country (Fig 1). The educational qualification of the parents were assessed. The educational status of father was below graduation in 35 (58.3%), 18 (30%) were graduates and 7 (11.7%) had attained post graduation. The maternal educational status were below graduation in 49 (81.6%), 9 (15%) had obtained graduation and 2 (3.7%) post graduation.

#### 2. Attitude about Rhinoplasty

7 (11.7%) knew of someone who had undergone rhinoplasty among relatives or friends while 53(83.3%) were not aware (Fig 2). Among them 5 were friends and 2 had close relatives who had undergone rhinoplasty previously. 58 (96.6%) were contented with the appearance of their nose where as 2 (3.4%) weren't happy with their appearance. 60 (100%) were aware of rhinoplasty being done in our centre. 51 (85%) among the study group felt that people undergo rhinoplasty for beauty, 7 (11.6%) on insist from friends and 2 (3.4%) were of the opinion that professional demands is the mainstay for undergoing rhinoplasty. 58 (96.6%) felt that fear of surgery and its complications is the major deterring factor for undergoing rhinoplasty where as 2 (3.4%) opined financial constraints as the major factor.

#### 3. Complications about rhinoplasty

54 (90%) had knowledge about the complications of rhinoplasty where as 6 (10%) were ignorant (Fig 3). Among the 54, 48(88.9%) were aware of residual defect after the procedure, 32 (59.2%) regarded periorbital oedema as a complication. Saddle nose as a possible complication was considered by 26(48.1%) and poly beak deformity by 12(22.2%).

**Fig 1. Demographic Characteristics**

Age	20 -29 Yrs	22.8+/- 2.93
City Of Birth	Mangalore	52 (86.6%)
	Other	8 (13.4%)
Educational Qualification Of		
Father	Below Graduation	35 (58.3%)
	Graduation	18 (30%)
	Post Graduation	7 (11.7%)
Mother	Below Graduation	49 (81.6%)
	Graduation	9 (15.0%)
	Post Graduation	2 (3.7%)

**Fig2 Attitude about Rhinoplasty**

**Do You Know Someone Who Has Undergone Rhinoplasty Before?**

	YES	7 (11.7%)
How Do Feel About Your Nose	Friend	5
	Relative	2
	No	53 (83.3%)
Why Do People Get Rhinoplasty Done	Good	58 (96.6%)
	No	2 (3.4%)
Why Dont People Get Rhinoplasty Done	For Beauty	51 (85%)
	Insist Of Friends	7 (11.6%)
	Other Reasons	2 (3.4%)
Are You Aware Of Rhinoplasty Done In Our Centre	Fear Of Surgery	58 (96.6%)
	Financial Constraints	2 (3.4%)
	Yes	60 (100%)
	No	

**Fig3 Complications of rhinoplasty**

Are you aware of side effects of rhinoplasty		
	Yes	54 (90%)
	No	6 (10%)
If yes	Residual defect	48 (88.9%)
	Peri orbital oedema	32 (59.2%)
	Saddle nose	26 (48.1%)
	Poly beak deformity	12 (22.2%)

### 4. Discussion

In recent years there has been a developed image awareness among various racial and ethnic groups throughout the world. Perhaps because people live longer a greater sense of self esteem based on the way one's looks have developed(2). Though a hot topic in conferences, rhinoplasty remains a cryptic topic to

layman(3). Even the health care professionals who are the major source of knowledge and referral of the patients have limited knowledge about rhinoplasty. So, to assess the attitude and awareness about rhinoplasty we conducted a questionnaire based study.

We selected female paramedics who were permanent employees of our institute aged between 20 to 30 yrs for the study. This cadre of the employees are in constant touch with the patients attending the out patient department as well as the camps conducted in different parts of the city as well as periphery and are a major source of referral and guidance. 52 were from the city of Mangalore and were well versed with the local population. In India unlike in western countries, the public literacy rates and awareness are very disproportionate(1). The educational status of the fathers was below graduation in 35 (58.3%), 18 (30%) were graduates and 7 (11.7%) were post graduates. Similarly 49 (81.6%) were below the level of graduation, 9 (15%) were graduates and 2 (3.7%) had attained post graduation. Cosmetic surgery is concerned primarily with the maintenance, restoration or an enhancement of an individual's physical appearance through surgical and medical techniques(4). In terms of the factors affecting the likelihood of having cosmetic surgery, the available evidence suggests that women report a greater likelihood of willingness to undergo various cosmetic procedures as a function of greater sociocultural pressure on women to attain ideals of physical and sexual attractiveness(5). In our study, 58 (96.6%) were satisfied with the appearance of their nose where as 2 (3.3%) were not so. 7 (11.7%) knew rhinoplasty being done on close relatives or friends where as 53 (83.3%) did not know of anyone who has had rhinoplasty before. Since our centre is a tertiary referral centre 60 (100%) of the staff members were well aware of the fact that rhinoplasty was routinely done in our department. According to the acceptance of cosmetic surgery scale there are three components that determine willingness to undergo such a procedure:

Intrapersonal – which measures attitudes related to self oriented benefits of having cosmetic surgery.

Social – Social motivations that influence the decision to have cosmetic surgery.

Consider – measures likelihood of having cosmetic surgery taking into account factors that may influence decision making process(6). 51 (85%) of the study group felt that rhinoplasty is done for beauty where as 7 (11.6%) felt for the insist of friends, 2 (3.4%) cited professional requirements. Those who desired aesthetic surgery described people who have cosmetic procedure as motivated where as those who would not choose this option believed individuals who do so are vain. The main reasons for not undergoing were health risks, cost and fear of bad results(7). 58 (96.6%) were of the feeling that people do not undergo rhinoplasty for the fear of surgery where as 2 (3.4%) concluded that financial constraints deter rhinoplasty.

The complications of rhinoplasty can be divided into; Intra op – Excessive bleeding, Tear of mucoperichondrial flap, Button holing of skin, Cautery burns, Collapse of bony pyramid, Disarticulation of upper lateral cartilage, Perinasal trauma.

Immediate post op - Airway obstruction, Anaphylaxis, Visual impairment

Early post op- Haemorrhage, Septal haematoma, Infection, Dehiscence of incisions, Persistent oedema, Skin necrosis, Sequestrum

Late- Scar hypertrophy, Polly beak deformity, Synechae, Septal perforation, Nasal valve collapse, Nasal stenosis, Patient dissatisfaction(8). In our study group, 54 (90.0%) had an awareness about the complications of rhinoplasty where as 6 (10%) did not. 48 (88.9%) considered residual defect as a complication where as 32 (59.2%) were knowledgeable about peri orbital oedema, 26 (48.1%) were aware about saddle nose as a result of rhinoplasty and 12 (22.2%) knew poly beak deformity would happen as a consequence of rhinoplasty.

## 5. Conclusion

Of late there is a more positive social attitude towards cosmetic surgery. Motivation for seeking rhinoplasty arises from a culturally inspired desire for beauty and attractiveness for their own sake or as a recognised preliminary necessity to make friends and attract opposite sex (9). It is very important to enlighten the general public about the various aspects of rhinoplasty as well as to educate against unrealistic expectations and about the complications of the procedure. It can be efficiently done by the health care professionals who are in constant touch with the various strata of the population than medical professionals. Literature on psychological aspects of rhinoplasty is sparse when compared with the publications on methods and instrumentation(10). Hence, a novel attempt is made by us in this regard to assess the attitude, knowledge about rhinoplasty in health care professionals.

## 6. References

- [1] Panse N, Panse S, Kulkarni P, Dhongde R, Awareness and perception of plastic surgery among health care professionals in Pune; India, Do they really know what we do?, *Plastic Surgery International* 2012;10;1155-64.
- [2] Pierce HE, Cosmetic head and face surgery – Ethnic considerations, *Journal Of National Medical Association*, May 1980;72(5);487-92.
- [3] Kumar V, Kumar A, Faisal A, Nandini R, Awareness among medical fraternity regarding the role of plastic surgeon, *Indian Journal Of Plastic Surgery*, Sep-Dec 2011;44(8);494-97.
- [4] Adeyemo WK, Mofikya BO, Bamgbose BO, Knowledge and perceptions of facial plastic surgery among a selected group of professionals in Lagos, Nigeria, *Journal of Plastic Reconstructive and Aesthetic Surgery*, 2010;63(4);578-82.
- [5] Swami V, Chamorro T, Bridges S, Acceptance Of Cosmetic Surgery; Personality and individual difference predictors, *Body Image* 2009 Jan; 6(1):7-13.
- [6] Sarver DB, Cash TF, Mager L, Williams F et al, Female College Students and Plastic Surgery; An investigation of Experiences, Attitudes and Body images, *J Of Plast Reconstr Surg* 2005;115;931-8.

- [7] Pearl A, Weston J, Attitudes of Adolescents about Cosmetic Surgery, *Ann Plast Surg* 2003;50(6):628-30.
- [8] Miamroodi AA, Eslami M, Khanjani N, Interest in Rhinoplasty and Awareness about its post operative complications among female high school students, *Iranian Journal Of Otorhinolaryngology*, No 3, Vol 24, April 2012,135-43.
- [9] Piromchai P, Suetrong S, Arunpongpaisal S, Psychological Status in patients seeking Rhinoplasty; *Clinical Medicine Insights – Ear Nose and Throat*, 2011;4, 31-5.
- [10] Tasman AJ, The Psychological aspects of Rhinoplasty, *Curr Opin Otolaryngol Head Neck Surg* 2010 Aug; 18(4);290-94.