

ASSESSMENT OF KNOWLEDGE AND PERCEPTION OF RECONSTRUCTIVE SURGERY AMONG MEDICAL INTERNS.

Dr. Mathura Prasad Agrawal¹, Dr. Somshekhar Sharma²

¹Assistant Professor, Dept. of General Surgery, Pacific Institute of Medical Sciences, Umarda, Udaipur, Rajasthan

²Assistant professor, Dept. of Forensic Medicine, Pacific Institute of Medical Sciences, Umarda, Udaipur, Rajasthan

Article Info: Received 03 May 2021; Accepted 23 June 2021

DOI: <https://doi.org/10.32553/ijmbs.v5i7.2044>

Corresponding author: Dr. Somshekhar Sharma

Conflict of interest: No conflict of interest.

Abstract

Plastic surgery is an essential surgical sub speciality which is commonly represented as being a purely aesthetic improvement science. However in reality it holds a vital link in management of oncological or trauma cases. The medical science curriculum does not put weightage on this sub speciality. The present study was formulated to ascertain if the medical interns are adequately oriented to this speciality and the perceptions that they hold for the science. The study included 102 interns who submitted a questionnaire for assessment of their knowledge and perception. The results led to the conclusion that inadequate knowledge exists in terms of plastic surgery and must be attended to.

Keywords: Interns, Reconstructive surgery, perceptions

Introduction

The field of cosmetic surgery has been well developed as a surgical sub-speciality since its introduction almost 4 decades back. The growth has been linear and well defined with its use being promoted in even developed countries. (1) Plastic surgery is well defined as the specialty concerned with restoration, reconstruction, and enhancement of the function and appearance of body structures that are missing, defective, damaged, or misshaped. It includes both reconstructive and cosmetic surgery (2), cosmetic surgery on the other hand is specific to aesthetic enhancement.

The quantum of training and skill required for performing plastic surgery is extensive and daunting. The general perception among the public and no medical professionals is that plastic surgery is an exclusive enhancement procedure and has little bearing on the health status of an individual. (3) even the distinction among medical professional is seldom clear as individuals tend to amalgamate both the sub specialities of reconstructive and cosmetic surgeries. (4)

The mass media outlets have further compounded the problem by descriptions of plastic surgery being a solely body enhancement science directed towards rich and ageing females. The misconceptions that have been accrued are promoting a negative and invalid view of the science. (5)

The present study was thus formulated to understand the perceptions and knowledge regarding reconstructive surgery and plastic surgery as a whole among recently inducted doctors i.e. interns. These individuals have recently completed their examinations and are fresh

entrants in fields of medical science. It is hoped that an unabridged and broader viewpoint on the image of plastic surgery can be obtained from them.

Material and Methods:

The present study is a cross sectional, observational, questionnaire based study conducted at Pacific Institute of Medical Sciences, Udaipur Rajasthan over a period of 4 months from September to December 2020. The study entailed the voluntary participation of interns posted in the institute. Institutional ethical clearance was obtained before starting the study. The subjects were provided with a link to a Google Forms survey which was used for collecting the responses. The responses were kept confidential and were only shared with the authors. The study participants were informed that only demographic data such as age and gender were to be provided. No names or roll numbers were to be submitted. Any entries bearing any other identification were excluded from the study. The second aspect of the questionnaire dealt with assessment of student knowledge and was graded on their responses. Third part was based on their perceptions and source of them. The three parts were to be filled concurrently in the same survey. Incomplete survey's were excluded. The content validation was done by institutional statistician.

The data collected was compiled in an MS Excel sheet and subjects to tests for central tendency and significance.

Observations:

The present study was conducted with the participation of 102 completed survey which were submitted before the

deadline of 15 December 2020. The subjects comprised of 58 females and 44 males. The mean age of the subjects was 22 years. The subjects had all completed their final year examination in the same year.

44 subjects (43%) stated that they had never been exposed to a case in plastic surgery till the date of survey. 35% of the subjects responded that cosmetic and reconstructive surgery is the same field. Among these, 27 were males while 9 were females.

All the subjects answered correctly that reconstructive surgery requires a super specialization degree after postgraduation. In terms of the type of cases dealt with in reconstructive surgery, the commonest answer was burns (75.4%), while other responses included cleft palate and rhinoplasty. Breast augmentation was very frequently responded also (52%)

When asked if reconstructive surgery is relevant to oncosurgical cases, 87.25% subjects responded in affirmative.

Table 1: Tabulation of Knowledge and Perception scores.

Gender	Total number	Mean age	Mean Knowledge score (10)	Mean Perception Score (10)
Male	44	21.9 years	6.7	5.6
Female	58	22.12 years	7.9	6.9
p- Value	NS	NS	<0.05	<0.05

Table 2: Responses from Study Participants

Query	Response % (Positive/ Correct)	p value
Case exposure	58%	<0.05
Educational Requirements	100	NS
Different types of reconstructive surgeries	65	<0.05
Role in non-aesthetic fields	87.25	NS
Exposure from Media is more	91 %	NS
Essential Branch of Surgery	97%	NS

In terms of perceptions, 91.1 % subjects responded that they had seen medically themed show on television or on OTT platforms. 44.2 % subjects stated that plastic surgery is an enhancement or beautification modality. Majority of respondents agreed that plastic surgery plays an important role in cases of burns, trauma or disfigurement. On being asked about their sources for information on plastic surgery, 56.8 % responded that their prime source was internet followed by textbooks. 8.8% subjects stated that they would be taking up plastic surgery as a field in their practice.

A tabulated response was generated and decoded that among the interns, females had shown better levels of knowledge and perception as compared to the males. (Table 01 & 02)

Discussion:

As plastic surgery is a unique specialty that deals with everything from head to toe, it has no organ system of its own. Our data show that medical interns lack a proper understanding of the specialty of plastic surgery. These findings are consistent with those of other studies that defined plastic surgeons as cosmetic surgeons only or did not recognize the surgeries that are commonly performed by plastic surgeons, such as hand surgery and cleft palate surgery. (6-7) Interestingly, these misconceptions are also held by other groups, including the public, primary care physicians, and residents. (8-9)

The subjects in our study stated that commonest modality treated by plastic surgeons in burns, this is agreement with

studies by Indian authors and others (8,10) in their studies wherein the commonest condition mentioned was burns. However the percentage is higher in our studies compared to theirs. However we are in contradiction with a study in Pakistan wherein the commonest modality was stated to be hair transplants. (10)

The commonest source of information cited in our study was the internet. This is in concurrence with other similar studies. The aspect of being exposed to medically oriented shows was also a second common aspect which was seen to influence the perception among the interns. This is also in concurrence with other similar studies.(11-12)

Conclusion:

It is imperative that medical education be revamped to provide a holistic view of plastic surgery and its importance to all sections of the society. The field is inadequately represented and holds little sway for the untrained and novice medical intern. The use of social media and audio visual platforms can be used to provide a more comprehensive view of the speciality

Reference:

1. Heidekrueger PI, Juran S, Patel A, Tanna N, Broer PN. Plastic surgery statistics in the US: evidence and implications. *Aesthetic plastic surgery*. 2016 Apr 1;40(2):293-300.
2. Tucker DC, Craig P. *Pathways to nursing: A guide to library and online research in nursing and allied health*. Information Today, Inc.; 2004.

3. Agarwal P. Perception of plastic surgery in the society. *Indian Journal of Plastic Surgery*. 2004 Jul;37(02):110-4.
4. Panse N, Panse S, Kulkarni P, Dhongde R, Sahasrabudhe P. Awareness and perception of plastic surgery among healthcare professionals in Pune, India: do they really know what we do?. *Plastic surgery international*. 2012;2012.
5. Fraser SJ, Al Youha S, Rasmussen PJ, Williams JG. Medical student perception of plastic surgery and the impact of mainstream media. *Plastic Surgery*. 2017 Feb;25(1):48-53.
6. Heidekrueger P, Broer PN, Ninkovic M. ISAPS plastic surgery statistics—a closer look. *European Journal of Plastic Surgery*. 2016 Feb 1;39(1):81-2.
7. Kim DC, Kim S, Mitra A. Perceptions and misconceptions of the plastic and reconstructive surgeon. *Annals of plastic surgery*. 1997 Apr 1;38(4):426-30.
8. Tanna N, Patel NJ, Azhar H, Granzow JW. Professional perceptions of plastic and reconstructive surgery: what primary care physicians think. *Plastic and reconstructive surgery*. 2010 Aug 1;126(2):643-50.
9. Mortada HH, Alqahtani YA, Seraj HZ, Albishi WK, Aljaaly HA. Perception of plastic surgery and the role of media among medical students: cross-sectional study. *Interactive journal of medical research*. 2019 Apr 3;8(2):e12999.
10. Ahmad M, Mohmand H, Ahmad N. Views of college students on plastic surgery. *World journal of plastic surgery*. 2013 Jun;2(2):104.
11. Fevzi Dikici M, Yaris F, Topsever P, Muge Filiz T, Serdar Gurel F, Cubukcu M, Gorpelioglu S. Factors affecting choice of specialty among first-year medical students of four universities in different regions of Turkey. *Croatian medical journal*. 2008 Jun 15;49(3):415-20.
12. Dunkin CS, Pleat JM, Jones SA, Goodacre TE. Perception and reality—a study of public and professional perceptions of plastic surgery. *British journal of plastic surgery*. 2003 Jul 1;56(5):437-43.