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Aesthetic Surgery Training and Practice in India: A Survey

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Abstract

Introduction Aesthetic surgery is a rapidly evolving subspecialty in high demand worldwide. To be considered a fully trained plastic surgeon, all the requirements of the curriculum must be met through to successful completion, including aesthetic surgery. At present, a disparity exists between the demand and provision of aesthetic surgery training in India. This survey evaluation highlights the responses, concerns, and possible solutions regarding training and practice of cosmetic surgery in India.

Methods A meticulously crafted survey comprising of 19 questions discussing the background, training, and practice of cosmetic plastic surgery, was sent across to all accessible plastic surgeons trained or training in India. A total of 506 responses were received. The responses were analyzed and have been presented in this study.

Results The survey was completed with all participants answering all the questions. Pertinent questions regarding practice setup, percentage of aesthetic work in practice, exposure of trainees to aesthetic procedures, and merits of an aesthetic fellowship revealed a lot about aesthetic training in India. The participants also expressed their level of satisfaction with their principal plastic surgery training. Summarizing these findings, suggestions for improvements in training were made.

Conclusion Plastic surgery residency programs need to ensure that residents receive comprehensive exposure to both surgical and nonsurgical cosmetic procedures to ensure maintenance of service standards and optimum patient care. The information collected can help us formulate strategies to improvise the current cosmetic surgery training across India. Steps taken toward the same are also highlighted in the study.

Keywords

- aesthetic surgery
- training
- survey
- plastic surgery training
- plastic surgery curriculum

Introduction

Aesthetic surgery is a rapidly evolving subspecialty in high demand worldwide.[1] To be considered a fully trained plastic surgeon, all the requirements of the curriculum must be met through to successful completion, which includes aesthetic surgery.[2] The way aesthetic surgery is taught in residency programs varies widely across the world.[3] In India, there is a lack of standardization of the training and the pattern of examination for completion degree of plastic surgery. The disparity exists from state to state and the centrally funded institutes of excellence. This is turn results in differing levels of training and the pattern of examination for the successful completion of plastic surgery training.[4]

We confirm that the guide to authors was read and agreed to and that it has not been published previously or being considered elsewhere and the submission is approved by all authors.

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Majority of training institutes in India, are indeed government funded, and catering to the mass population at subsidized pricing, focused on provision of reconstructive surgery. Aesthetic surgery is considered not so important, and is usually left until the end, sometimes only after training completion. The onus of cosmetic surgery training often falls on the student and is achieved in part by watching expert surgeons in their private clinics, attending courses, observerships, fellowships, and paid training workshops. In the Indian scenario, there is a great step of staring Aesthetic Pathshala, where weekly webinars are conducted with national and international faculty, discussing current aesthetic topics.

At present, a disparity exists between the demand and provision of aesthetic surgery training in India. The current boom in globalization[5] and improved standard of living reflects in much increased demand of aesthetic surgery and procedures alike. The newly trained plastic surgeon in India faces new challenges and competition in aesthetic practice arena. The well-informed, increasingly demanding, and social media aware patient expect highest standards of aesthetic surgery and results. Competition in aesthetic surgery comes not only within plastic surgery but also from otolaryngologists, ophthalmologists, dermatologists, dentists, and physicians outside conventional cosmetic-related specialties.

This survey evaluation highlights the responses, concerns, and possible solutions regarding training and practice of cosmetic surgery in India.

Methods

A meticulously crafted survey comprising of 19 questions discussing the background, training, and practice of aesthetic plastic surgery was sent across to all accessible plastic surgeons trained or training in India. The survey was conceptualized and created using an online platform SurveyMonkey.[6] A link giving access to the survey was sent across to all accessible plastic surgeons by emails and social media groups. A time frame of 60 days was considered optimal, after which no responses were accepted. The survey typically took less than 10 minutes to complete, and only complete survey responses were accepted and analyzed. A general consent was obtained at the start of the survey to participate in the survey and the personal details of the participants were kept optional except for email address for the purpose of verification.

The survey focused on three broad categories

1. Training background specifics
2. Practice setup and percentage of dedicated work towards aesthetics
3. Self-reported competencies and satisfaction

The resultant data was analyzed and tabulated and represented in graphical demonstration. A total of 506 complete responses were received. Data from incomplete surveys were excluded ($n = 109$). No incentives were provided to participate in the survey.

Results

The responses of 506 participants, in all, were recorded for the 19-question questionnaire circulated via digital media platforms to plastic surgery residents and consultants (most within 10 years of completing of training/fellowships) within closed groups such as WhatsApp, Telegram, and Facebook. Of the 506, 442 chose to disclose their gender (M: 362, F: 80).

Ninety-nine percent ($n = 437/441$, 441 out of 506 responded) participants have had their plastic surgery training (MCh/DNB) from India, of which 84% were MCh trainees or graduates while only 25% were DNB.

Of the 402 who answered, 51% had received their training in state run public healthcare institutes, 28% from central government run institutes, and the rest from others. Hence, about 79% of the participants had received their training from government (center/state).

It was found that nearly 50% of the participants were within 5 years of practice after having completed their graduation/fellowship (if any).

Majority, 42%, of participants were found to be working in a corporate setup, while only 13% were found to be employed in the government setup. About 12.94% answered as still in training and another 17.66% had their own setup.

A staggering 50% did not receive any specific structured aesthetic training after residency, while 21.64% had visiting observerships (India/abroad) and 12.44% had short-term (less than 6 months) foreign fellowships. Approximately 2.5% only received formal (certified) aesthetic surgery training for 6 months or more (India/abroad).

When asked whether they had been awarded any grants from any association for pursuing aesthetic surgery training post-residency, 39.55% admitted that they sponsored themselves for such training, India or abroad. Again, nearly 54% did not have any formal aesthetic training.

On being asked, how adequate they felt their training in aesthetic surgery was during/after residency, approximately 81% felt their aesthetic training was inadequate for them to have practiced independently from the very beginning of their practice.

The survey also revealed that 70.65% did not have any exposure to nonsurgical aesthetic procedures (toxin, fillers, peels, lasers) during their residency training.

Almost 93% felt the need to have cadaveric training/simulation lab during residency, to help with aesthetic surgery training.

When asked how confident were they of undertaking aesthetic surgery procedures post-training/fellowships, approximately 58% were under confident to undertake cosmetic surgeries post-training or only 25% were confident of undertaking cosmetic surgeries independently post-training.

When asked how the participants would like their plastic surgery training be modified pertaining to incorporation of aesthetics in it (multiple answers were allowed for this question), a vast majority 85% said that they would like a structured rotatory training program during their residency (and not after), to centers where exclusive aesthetic work is done. Fifty-five percent showed interest in association-sponsored

fellowships, while 42% were for a travelling fellowship through a grant.

While assessing how much percentage of work comprises of aesthetic work in one's practice, 56% of participants said that their present practice has up to 20% of exclusive aesthetic work, while only 21% had more than 50% of their work dedicated to aesthetic surgeries alone.

Almost equivocal responses were elicited when participants were asked, as to what type of practice would they like to pursue post their residency/training. Fourteen percent were for solo private practice, 14% for corporate hospital attachment, 21% for group private practice, and 16% were for academic institution with plastic surgery training program, so that they remain abreast with teaching activities.

Sixty percent participants see themselves incorporating aesthetic surgeries in their practice, even though their training has been mainly in reconstructive plastic surgery during their residency within 0 to 5 years of starting practice.

When asked whether a conference/workshop contributes to their aesthetic surgery training, 96% participants agreed to moderate and significant contribution.

Fifty-four percent also confirmed a more focused, plastic surgery-oriented training after undergraduation (a consolidated plastic surgery training program incorporating both reconstructive and aesthetic curriculum, without having general surgery as base), while 33% thought otherwise.

Discussion

In this modern day and age, when the global aesthetic industry is worth billions of dollars,[7] plastic surgeons need to train themselves with utmost diligence and stand out among the crowd (comprising of all other medicos and nonmedicos who practice aesthetic medicine/surgery), offering results par excellence and quality patient care.

With the background knowledge of ever-increasing consumer demands, social media awareness, and advent of new/improved surgical and nonsurgical armamentarium to meet those demands, the proportion of aesthetic surgical practice is growing exponentially in a plastic surgeon's career.

Hence, this survey aims at exploring the avenues to improve our training and churning out confident, well-trained aesthetic plastic surgeons.

At the outset, it is evident from the survey that there is lack of adequate aesthetic surgery training during residency program, be it MCh or DNB, and whether it is from a government run or a private teaching institute.

As shown by our survey, younger plastic surgeons are more keen to practice in the private sector, with an increasing trend in pursuing corporate or private practice and incorporating aesthetic surgery and medicine, early on in their professional lives.

The fact that just like reconstructive surgery, aesthetic surgery has also ramified into numerous highly specialized niche subsets such as body contouring, facial aesthetics, and nonsurgical rejuvenation, this has enabled more focused approach on aesthetic surgeries and procedures, keeping up with the recent trends.

Our survey shows that one of the most important aspects of aesthetic surgery training is compulsory rotation of residents through aesthetic surgery units (hospitals or private centers) during residency itself, where they get to observe and assist experienced aesthetic surgeons. Structured training modules (as in a fellowship) and cadaveric dissection labs are strong tools to impart quality training in the sphere of aesthetics during residency itself.

To cite an example, a study conducted by the Canadian plastic surgery community arrived at conclusions on similar lines. They are of the opinion that outreach to nonacademic plastic surgeons with the required experience should be sought locally or nationally, suggesting rotation of residents through aesthetic surgical centers of excellence during or just after residency.[8]

A similar survey by the American counterparts revealed and suggested that encouraging programs that are deficient in certain aspects of aesthetic surgery should establish formal rotations with stronger units (high volume aesthetic surgery units).[9]

When we explore, this fact is also reiterated in other spheres of plastic surgery training. It has been proven beyond doubt that cleft lip and palate cases can be managed more effectively, when plastic surgeons work as a team with their orthodontic colleagues and/or have rotation in orthodontic units to understand and incorporate orthodontic principles in management of these complex cases, holistically.[10]

At present, in our study, nearly 50% of plastic surgeons practicing aesthetic surgery do not have any formal training of aesthetic surgery during or after residency. Due to this lack of exposure during the formative years, many fresh passouts are under confident to perform complex procedures independently, especially during their initial years of practice. In fact, we discovered that majority of the training in aesthetic surgery takes place after residency and is usually self-sponsored. The issue of aesthetic training is not unique or limited to India but institutions worldwide institutes are facing challenges delivering high-quality aesthetic training to its plastic surgery residents.[11–14]

Some efforts to improve the training in Aesthetic surgery are already proposed and implemented, such as uniform curriculum across all institutes, starting nationwide multicenter fellowships in aesthetic surgery training,15 exchange programs with international centers, representation of Indian presenters in foreign congress and conducting year-round online/offline academic activities apart from the main congress are some of the initiatives taken by the national association.

As per the American Society of Plastic Surgery, the total number of aesthetic procedures in 2005 were 10.2 million, with aesthetic surgery comprising of 1.8 million.[16] In 2010, there was increased trend of nonsurgical procedures amounting to 11.6 million and surgery total was around 1.6 million.[17] The most performed aesthetic surgery in 2005 was liposuction and in 2010 it was breast augmentation. The number quickly climbed up to 15.7 million procedures in 2019 with surgeries contributing to 2.6 million of the shares. Interestingly the most common surgery performed during this period is rhinoplasty.[18] Since 2005 botulinum toxin

injection has been the most common minimally invasive procedure till date. Because of pandemic in 2020, the number were down by 14% with aesthetic surgery total at 2.3 million and procedures at 13.2 million.[19] Post-2020, no further statistics have been posted. We assume that now since the effect of pandemic is subdued, the number are sure to rise, and aesthetic surgery and procedures will surge.

To our knowledge, this is the first survey of its kind conducted in India, showing a consensus of plastic surgeons showcasing lack of adequate structured training in aesthetic surgery and medicine. It also highlights the urgent need to revamp the system, to incorporate a more structured, systematic, and protocol-based approach to aesthetic surgery training in India.

We did come across some institutes where the focus was to place equal importance to aesthetic surgery training as much as reconstructive surgery.[20] A prime example of this was a paper from Cueva-Galárraga et al[21] showcasing a 20-year-old review of aesthetic plastic surgery training at the Jalisco Plastic and Reconstructive Surgery Institute. This would be a near ideal model to follow.

One of the limitations of this survey is that we have not been able to study how the post-pandemic boom in virtual training modules/platforms has affected aesthetic surgery and its training. We are aware of such free and paid models that are available online in the form of courses/masterclass series, or a live relay of an ongoing congress (in the form of a live webinar). The data collected in this survey has not studied the impact of these virtual training models conclusively.

However, we can proudly say that the pandemic taught us invaluable lessons in distance learning, as we saw the grand success of our Aesthetic Paathshala Series of online webinars roping in world-class faculty, with an anytime, free, post-relay access to the webinar for later learning and bringing surgeons from across the globe closer. We feel that this initiative itself would be very helpful for the learning and training of younger plastic surgeons, aspiring aesthetic surgery practice.

Another shortcoming of the survey was pertaining to the questions on the incorporation of aesthetic medicine and nonsurgical cosmetology in our practice. We understand that this is equally important in the holistic management of an aesthetic surgery patient. The only question pertaining to this issue in the survey revealed that a substantial 71% did not have any exposure to nonsurgical aesthetic treatments during their training, thereby emphasizing the necessity to incorporate this training in the curriculum itself as well. As per the statistics given above, over the last two decades, treatments such as botulinum toxin, fillers and nonsurgical treatments have acquired a lion's share in aesthetic practice. Thus, we recommend that the future trainings and surveys incorporate this important aspect in greater detail.

Finally, we do admit that this survey represents a fraction of population of plastic surgeons in our country and their mindset basically. A much larger participation, may be guided by the national societies, would give us a clearer picture and progress.

While there are many challenges, to improve the training and learning in Aesthetic Surgery, the new mindset of a specified focus toward aesthetic surgery and procedures along with support of senior mentors, during formative years, would go a long way to change the current scenario.

Conclusion

To conclude, there is some dissatisfaction in present and past plastic surgeons and trainees in India of the adequacy and uniformity of aesthetic surgery training. As more and more younger generations of plastic surgeons are focused on providing aesthetic surgery and services, it becomes imperative to train and equip ourselves to provide the most advanced treatments in a safe and ethical manner. With an increase in awareness and demand of patients, thanks to social media, an increase in exposure to aesthetic surgery, in a structured manner, during residency itself, will lead to improved patient care for future practicing surgeons, to ensure maintenance of competitive service standards. While efforts are in place to improve the current training by means of online learning and conference workshops, the information collected from the survey indicates that there is a further need to improve the current aesthetic surgery training and curriculum across India. It is prudent to systematize the training in aesthetic surgery, thereby setting high standards of patient care, nationwide.

Conflict of Interest
None declared.

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