### Reflections

# Advocacy and mass education in plastic surgery: Efforts and outcomes

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#### **ABSTRACT**

Background: Awareness of plastic surgery is lacking. Be it reconstructive surgery, or aesthetic surgery, public education and awareness regarding the spectrum is the need of the hour. Materials and Methods: We undertook a string of activities for patient awareness and education for burn prevention, occupational hand injuries prevention, skin banking awareness and various other conditions relevant to us as plastic surgeons. Use of social media helped us for increasing the reach of our projects. Observation and Results: Some of the projects we started, we are still pursuing with sincerity, and some never really picked up. A wide range and spectrum of activities were undertaken, and we would like to think that we have made some impact towards advocacy of plastic surgery; however, the measurable impact of these initiatives is questionable. Conclusion: Collective efforts for promotion of the speciality using innovative methods, use of celebrities for awareness and social media amongst other things must be undertaken to make a sustained and demonstrable impact towards advocacy of plastic surgery.

#### **KEY WORDS**

Advocacy and mass education in plastic surgery; burn prevention; occupational hand injuries; skin banking; undergraduate plastic surgery

#### INTRODUCTION

wareness of plastic surgery is lacking among the general public and medical personnel. The number of plastic surgeons is so small as compared to otherspecialities, that it is virtually not possible for us to address the entire spectrum of the work and create an awareness about the speciality. As a result different specialities are exploring their boundaries to impinge on what we claim to be rightfully ours.

Advocacy for plastic surgery has never been so important. We have to fend for ourselves, promote ourselves and shape the future of our speciality.

Increasing amounts of funds are being spent on communicable diseases, whereas those non-communicable

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diseases, which are preventable like burns or occupational hand injuries, causing a huge impact on the well-being of the society are neglected. Mass education to prevent such disasters helps the speciality to get deeper penetration into the society, which we feel is an essential step to advocacy. Over the years, we have worked in our own small way towards advocacy and mass education on topics related to us as plastic surgeons.

This article is an attempt to present our efforts since November 2008. Based on the experience, we look to improvise the ways to enhance the advocacy and mass education of plastic surgery speciality.

#### **MATERIALS AND METHODS**

#### Mass education for burn prevention

#### Pictorial guide for burns prevention

Burn injuries continue to be a major health problem and preventive measures cannot be overemphasised. We developed a pictorial guide depicting 'Do's' and 'Don'ts' for burn prevention. It deals with almost all the types of burns we come across in our day to day practice such as domestic, electrical, chemical, firecracker, vehicular and lightening burns. The booklet also gives guidelines to the general public on 'what to do' in case of fire and burns. The booklet is available for free download at: https://www.scribd.com/doc/201477988/Prevent-Burns-Marathi in Marathi and at https://www.scribd.com/doc/201474946/Prevent-Burns-Prevention-is-better-than-cure-In-English in English.

For increased impact, booklets in the Marathi language were distributed in municipal Marathi schools in Pune.

The funds for the printing of the books were provided by the American Association of Physicians of Indian Origin and Human Biosciences and distribution was undertaken by various non-governmental organisations (NGO's).

#### Training of school teachers and adopt a school policy

We visited various schools and took lectures for school teachers on the importance of burn prevention. It was also impressed on them that they are the ones who can teach the children about the basics of burn prevention.

Urban schools were requested to adopt a school each in the rural area and provide funds for providing booklets to these rural schools. The response was though not so positive, one of the rural schools at Sakherkherda village in Buldhana district was provided with booklets in Marathi for burn prevention education.

#### Use of social media and internet

The booklets on burn prevention were published and made available on the internet for free download. At the time of submitting the manuscript, there were 676 downloads of the booklet. An individual from Switzerland – after reading the booklet offered donations for a project on burn prevention video which was executed with the Film Technical Institute of India.

Soft copies of booklets were E-mailed to addresses of parents in the databases of some schools. Although the impact could not be measured, it was a very cost-effective means of reaching a wide audience.

This information on burns prevention was also put up on the website of centres of excellence for managing burn patients like The National Burns Centre – Airoli as well as the National Academy of Burns India.

#### Elevated kitchen platforms for cooking

Ground level cooking is one of the most common causes of paediatric burns in the country. In an initiation to prevent this, Jeevan Jyot Charitable Trust, an NGO provided elevated kitchen platforms to numerous households in urban slums on the outskirts of Pune. The elevated platforms were made up of three blocks of kadappa, and the cost of each of the platforms was Rs. 800/- [Figure 1]. Interestingly, the patients were happier because their knee problems were taken care of, in addition to the objective of burn prevention.



Figure 1: Elevated kitchen platform for cooking

## Attempts to incorporate burn prevention education in the school curriculum

We have been in contact with various authorities, including the Ministry of Human Resource Development (HRD) to incorporate burn prevention education in school curriculum. However, the results are not yet forthcoming. The HRD ministry appreciated the efforts, and also replied to our suggestion. They felt that school children are already burdened with various subjects, and it will not be possible to include additional syllabus in the curriculum. However, the teachers can be primed to gradually teach these topics as and when deemed necessary.

#### Burn prevention activities during Diwali

Every year during Diwali, there is an increase in the incidence of burn injuries. To promote safe firecracker practices, brochures were made in English and Marathi. These brochures were distributed at firecracker stalls across Pune. Firecracker vendors were distributed these brochures and were requested to give a copy to all the customers.

Images, especially related to firecracker injury safety and prevention were displayed on social networking sites to cater to a wider audience.

#### Burn prevention education in the wards

The victims who are admitted to the wards are already a proven high-risk group of individuals. They have in their vicinity all the factors which can cause recurrence of the accident, which may involve other family members or neighbours. Targeting this population, posters on burn prevention are displayed in the wards and they are handed over the burn prevention and burn care brochures during discharge.

#### Other ways of promoting burn prevention

Other ways like using T-shirts with burn prevention messages, Facebook and Whats app profiles were also used [Figure 2].

#### Burn prevention documentary videos

With the help of Film Technical Institute of India and Jeevan Jyoti Charitable Trust, we have come up with a video on burn prevention. It is a short documentary intended to be displayed at railway stations, bus depots and other public places for maximum impact. The video is also available for free download at https://vimeo.com/110649623.

#### **Patient awareness brochures**

Various brochures for patient information and awareness were created.

Brochures are also parked on social media for increased awareness. The various brochures available are:

- Arteriovenous (AV) fistula patient information brochure Marathi - https://www.scribd.com/doc/201484655/AVfistula-What-the-patient-needs-to-know-In-Marathi.
  - English https://www.scribd.com/doc/201479087/AV-Fistula-What-the-Patient-Needs-to-Know-In-English.
- Cleft lip and palate information brochure
   Marathi https://www.scribd.com/doc/155858290/
   Cleft-lip-and-Palate-information-brochure.
- Occupational hand injury prevention brochure
   Marathi https://www.scribd.com/doc/201485510/
   Occupational-Hand-Injury-Prevention-In-Marathi.
   English https://www.scribd.com/doc/201487337/
   Occupational-Hand-Injury-Prevention-In-English.
- Diet brochures to improve nutritional status, especially for burn patients needing repeated surgeries Marathi - https://www.scribd.com/doc/295772380/ Diet-Charts-for-Plastic-Surgery.
- 5. Diwali firecracker injury prevention and first aid brochures
  - Marathi https://www.scribd.com/doc/179122226/ Prevent-Burns-this-Diwali-Marathi-leaflet-pdf.
  - English https://www.scribd.com/doc/178952910/prevent-burns-in-diwali-english-pdf.
- 6. Skin donation awareness brochures.
   English https://www.scribd.com/doc/156520214/
   Skin-Donation-Information-guide.



Figure 2: T-shirt with burn prevention message

#### Changing the name of our speciality

We conducted a study on the awareness of plastic surgery among doctors in Pune, in 2012.<sup>[1]</sup> We found that the name of our speciality itself is not understood by many. Unlike other specialties, where the name itself indicates the work being carried out by that particular speciality, plastic surgery lags behind on this front. We feel an urgent need to change the name of the speciality from 'plastic surgery' to 'plastic, reconstructive and aesthetic surgery' and the name of association from Association of Plastic Surgeons of India (APSI) to Association of Plastic, Reconstructive and Aesthetic Surgeons of India.<sup>[1]</sup>

Asimilar effort was done by the British Association of Plastic Surgeons, who changed the name of the organisation to British Association of Plastic, Reconstructive and Aesthetic Surgeons in July 2006. [2]

# Awareness activities for skin donation and skin banking

There is limited knowledge amongst medical students regarding skin donation and skin banks.<sup>[3]</sup> The need for concentrated and continuous efforts to create awareness about skin donation was recognised by Gore and De.<sup>[4]</sup> However, most of their efforts such as preparation of brochures, posters, flip charts, articles in print media, television interviews and radio talks were targeted towards the general public.<sup>[4]</sup> We felt that apart from creating awareness in the general public, it is more important to create awareness in our own fraternity. If medicos are aware of skin donation, they can counsel the relatives of the patient regarding skin donation. That way, we will be able to tap the potential of deaths in hospital for skin donation.

As per our literature search, skin donation in specific and organ donation, in general, does not form a part of any of the popular reference books used by the undergraduates. We approached various authors and publishers requesting them to incorporate these topics in the reference books.

#### Telemedicine for advocacy of plastic surgery

Telemedicine is being increasingly used for diagnosis and management, but teleeducation has not yet gained popularity. We initiated awareness lectures for the medical officers and the telemedicine support staff at these centres. A document was created with pre- and post-operative images of the patients we cater to, and was mailed to all the telemedicine centres. This initiative helped in increasing direct referrals to plastic surgery through telemedicine.

#### Undergraduate education in plastic surgery

To bring the brightest and the best students to the plastic surgery fraternity, we should be able to tap them whereas they are still young. We need to interact with them more, but unfortunately, undergraduate curriculum has got a very little scope for plastic surgery topics. Kumar *et al.*<sup>[5]</sup> felt that plastic surgery department must be developed in all colleges in India, and medical students and surgical residents must be rotated for at least a week or two as part of their training program.

At our unit, we make it a point to devote the first lecture to the spectrum and scope of plastic surgery with a large number of clinical photographs to promote the interest of the undergraduates in plastic surgery.

### Occupational hand injury prevention activities and awareness

Freshwater deliberated on the likely status of hand injuries in India in 2061. We stressed on the need of hand injury prevention over the next 50 years. [7]

We initiated a minuscule campaign on occupational hand injury prevention by distributing pamphlets on prevention of occupational hand injury on World Labour Day 2011, the link to which is provided above. The need of a national occupational hand injury database was felt like never before. We have also appraised National Institute of Occupational Health, Indian Council of Medical Research and ministry of labour the need of giving more importance to occupational hand injuries. We have started our own online registry and efforts are on to request others to contribute so that we have a large database.

#### **RESULTS**

#### Failures and disappointments

We had our share of failures and disappointments, and they were definitely more than our successes. Regarding our successes:

- The burn prevention booklet effort was recognised by the government of Maharashtra. The support for publication and free distribution of these booklets in the schools was forthcoming initially. Around 15,000 booklets were distributed free of cost
- 2. More and more undergraduates have started approaching our department for study topics related to their short-term studentship programmes

3. The occupational hand injury registry is started, and we will have significant data regarding epidemiology over the next 5–7 years.

As regards our failures and disappointments:

- On many instances we used to find crumpled brochures lying outside the outpatient department. These were the same brochures; we had painstakingly created for education and awareness of our patients
- 2. Poor response to E-mail or snail mail from government bodies regarding our initiatives like the incorporation of burn prevention education in schools, starting an occupational hand injury registry and lack of time and commitment on our part to repeatedly go and follow up with the authorities concerned has reduced the pace of these initiatives.

There are intervening spikes of enthusiasm which give some momentum to these projects occasionally.

#### **DISCUSSION**

Individual and group efforts towards mass education and advocacy are fraught with failures, disappointments.

Sometimes, the work at hand takes a back seat due to other important issues. Then there is the realisation that in spite of all the efforts being taken and the time spent on these endeavours, very less is achieved. The input to output ratio is dismal and leads to frustration at times. There are no incentives. This leads to a diminution of interest in working towards advocacy of our speciality.

A lot of efforts are being taken throughout India for public awareness and preventive education in plastic surgery. Undergraduate and post-graduate quizzes are organised; plastic surgery days and weeks are celebrated. Undergraduate plastic surgery days are organised at some places. Painting competitions, promotional activities for burn prevention and skin donation are organised. Participation for various NGO's and the rotary and other organisations is solicited to promote advocacy and mass education. Most of the efforts taken in our country are at individual and institute levels. They are far too sparse, and collective efforts are lacking. Advocacy and lobbying for plastic surgery at the national level is almost non-existent.

For wider coverage and public awareness, the help of media must be sought. It is necessary that we as plastic surgeons give ample information to the media regarding the reconstructive aspects of plastic surgery. Professional communication services can be hired if needed to improvise on communication and awareness. Celebrities can be requested or hired to focuson the reconstructive part of plastic surgery. PSI may invite media personnel on an awareness trip to well-established centres to see a variety of procedures and the necessity of plastic surgeon in trauma centres, burn care, as reconstructive surgeons in trauma, congenital and oncological surgeries besides their role as an aesthetic surgeon. We should encourage media personnel to project a real picture to the general public and publicise the various conditions in which plastic surgeons play a role. Innovative ways of reaching the public must be sought and implemented.

Social media has immense potential and can help to a great extent in projecting our speciality. These efforts should be made at an association level.

Funds should be earmarked and made available for promoting advocacy and awareness of plastic surgery by the APSI. This would be very important from the patients point of view as increased advocacy regarding the spectrum of plasic surgery would increase direct referrals to plastic surgery and early and better management of patients.

Projects and thesis topics given to our students can have topics related to epidemiology, mass education and awareness of entities relevant to us as plastic surgeons, and not merely topics of scientific interest. After all these are the pillars on which the speciality stands.

#### CONCLUSION

We need dedicated, sustained and combined efforts as a team to make a sustainable and demonstrable impact towards promoting advocacy for plastic surgery and education of our patients.

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#### **Conflicts of interest**

There are no conflicts of interest.

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