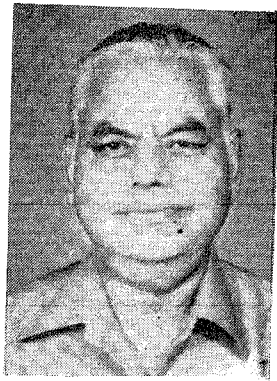


# Past, Present And Future Of Plastic Surgery In India

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Dr. J.L. Gupta, F.R.C.S.



Sushruta Oration, Hyderabad,  
December, 1991.

Among the ancient Hindus, punishment for infidelity among women was to cut off the nose. This helped to develop art of Rhinoplasty in India.

Famous Sanskrit Hindu writings of Rigveda and Ayurveda have made a mention of this art of Rhinoplasty. Sushruta - a great surgeon and teacher, had described in his book "SUSHRUTA SAMHITA" an operation for the reconstruction of nose known as the Indian method which is practiced even today.

To have a meaningful understanding of the past, present and future of Plastic Surgery in India, it is essential to be familiar with its heritage. The author acknowledges his gratitude to Dr. B. Mukhopadhyaya - a famous Orthopaedic Surgeon of Patna, Dr. N.H. Antia, Late Dr. R.N. Sharma, and late Dr. R.N. Sinha for providing valuable information on its past.

In India, this art of modern Reconstructive Surgery was practiced first by the military surgeons in the Second World War. During this period there were two Maxillofacial Surgery Units in India and one of them was manned by famous late E.W. Peet for a period of time.

FIG. 2 - Photograph of Mr. E.W. Peet.



Young Indian surgeons, who worked in these units were greatly impressed and sufficiently motivated to take up this as a speciality. Two of them then went abroad to specialize in Plastic Surgery and returned in 1950 to start pioneering work at Patna and at Nagpur. Major Sukh was also in the field of Plastic Surgery at the Armed Forces Medical College, Pune, because of his keen interest in this type of work.

Late Sir Harold Gillies, who had attained great fame by treating British war casualties of World War-II, paid a visit to India. He was pleasantly surprised to see patients being treated by preparing tube pedicals whenever necessary and by other modern techniques of Plastic Surgery. He was all praises for the excellent work that Major Sukh was doing in the field of Reconstructive Plastic Surgery in India at Armed Forces Medical College, Pune. By 1955, there were four to five Surgeons fully devoted to this speciality and felt the need to form an Association of Plastic Surgeons in India. Mr. B.K. Rankdoyen of Plastic surgery of Australia, was invited by Government of India to advise on the development of plastic surgery in India. During a meeting, he was asked to comment on the formation of an Association of Plastic Surgeons of India. In his usual forthright manner, welcomed such a move and further stated that "Association of Plastic Surgeons of Australia was formed with only five Plastic Surgeons".

FIG. 3 - Photograph of Sir. B.K. Rank



In the Annual General Body Meeting of A.S.I held in December, 1956, at Indore, Late Dr. R.N. Sinha moved resolution to that effect. A Sub-Committee was then formed with Dr. P.V. Menon of Madras as its Chairman and Dr. R.N. Sinha of Patna as the Convenor to frame By-laws and Regulations. Association of Plastic Surgeons of India 'as a section of Association of Surgeons of India' was accordingly formed.

Late Dr. R.N. Sinha, Pioneer and one of the founders of the speciality of Plastic Surgery in India with his dynamic leadership made great efforts to educate surgical colleagues, State and Central Governments and the Medical Council of India and impress upon them the need to develop Plastic Surgery as a speciality. He wrote numerous articles in scientific journals and in laypress to drive this point home. This indeed was a great task since there were no books, or literature available to read and learn about this new speciality.

FIG 4 - Photograph of Dr. R. N. Sinha



Dr. C. Balakrishnan - a devoted and dynamic, young Plastic Surgeon was making great strides at the Medical College & Hospital, Nagpur, and had carved out a niche for himself. In this newly developing speciality, he attracted patients from far and wide and with his meticulous planning, and highly disciplined a manner and dedication was able to impress authorities and patients alike.

FIG. 5 - Photograph of Dr. C. Balakrishna



Plastic Surgery section of A.S. I was formally inaugurated at Nagpur in December 1957. This was indeed a great historic moment and one remembers this event even more vividly to this date, because it was inaugurated by Sir Harold Gillies himself in person.

FIG. 6 - Photograph of Sir Harold Gillies.



NAGPUR Dec. 1957 -  
THE ASSOCIATION ELECTED :

Late	Dr. R.N. Cooper	... President
	Dr. C. Balakrishnan	... 1st Vice President
Late	Dr. R.N. Sinha	... Founder Secretary
Late	Dr. M. Mukherjee	... Founder Member
Late	Dr. R.N. Sharma	... Founder Member
	Dr. N.H. Antia	... Founder Member
	Dr. Hivedia	... Founder Member
	ENT Specialist - Bangalore	

December, 1958- THE ASSOCIATION ELECTED :

	Dr. C. Balakrishnan	... President
Late	Dr. R.N. Sharma	... Vice President
Late	Dr. R.N. Sinha	... Continued as Secretary

and rest as Members to the Council for a period of three years (1958 - 1960)

In this eventful year Dr. C. Balakrishnan trained under Prof. Killner in the United Kingdom continued his efforts in a systematic and organised manner and succeeded in establishing the first independent Department of Plastic and Maxillofacial Surgery at Govt. Medical College and Hospital, Nagpur. He was required to formulate a syllabus in which he had to decide on duration of specialization training, minimum qualifications required to enrol for such training, and also decided on minimum qualifications of teachers and of their prospects in this speciality ; on whom was to rest the responsibility of future progress of the speciality. He also formulated syllabus for supportive paramedical services of occupational therapy and created posts for Dental and Para-medical staff in his Department.

This was achieved despite considerable opposition from his own colleagues as well as Surgeon General of the Maharashtra State. His pioneering efforts in spite of all odds in organising a large unit of excellence will remain an outstanding example to our young colleagues of what a dedicated person can achieve under most difficult conditions. This Plastic Surgery Unit at Medical College, Nagpur, was elevated as first and the only ungraded Department of Plastic Surgery in the country by the Government of India and teaching of Plastic Surgery leading to M.Ch. Degree was started in 1960. Similar course leading to M.S. in Plastic Surgery was started at the Medical College, Patna the same year.

PUNE - Decembe, 1960 :  
THE ASSOCIATION ELECTED

- Late Dr. R.N. Sinha - President
- Late Dr. M. Mukherjee - Vice President
- Dr. N.H. Antia - Secretary
- Late Dr. C. Pinto joined as Member of the Council.

Dr. N.H. Antia afte his Post - Graduate Training in Plastic Surgery from U.K. joined a private Hospital at Pune. He by chance discovered a store-house of facial and hand deformities at the Khandala Leprosy Hospital near Pune and started to work there also. Sterilized drums with linen and instruments had to go all the way from Pune and O.T. was a make-shift arrangement. Yet this work at considerable hardship on the part of Dr. Antia, his Anaesthetist and assistant was carried out uninterrupted on absolutely voluntary and honorary basis. It is an example of what stuff the Pioneer Plastic Surgeons were made of.

FIG . 7 - Photograph of Dr. N.H. Antia



During his visit to Pune, Sir Harold Gillies demonstrated various operations and techniques. Gillies as the Founder of Plastic Surgery was keen to propagate his knowledge and the speciality in one of the most populous countries of the world. He visited and lectured at several centres in various part of the country including Calcutta, Delhi, Patna, Jaipur and of course Nagpur, where he inaugurated the Association of Plastic Surgeons of India as a section of A.S.I.

Before leaving for England at Bombay, he absolutely insisted on making a token down payment of Rs. 100/- to Dr. Antia and wanted this to be an inspiration for Dr. Anita to continue his efforts to establish with Government help, a Department of Plastic Surgery in one of the Government Medical Colleges at Bombay. This proved to be a great

morale booster and the first unit of Plastic Surgery was started at J.J. Hospital, Bombay in December, 1958 with Dr. Antia as its Head. His pioneering work in Leprosy was rewarded by an invitation from England to deliver "Huterian Lecture" at the Royal College of Surgeons.

FIG . 8 - Photograph of Dr. R.J. Maneksha



Similar, Dr R.J. Maneksha was responsible for establishing the Unit of Plastic Surgery at G.T. Hospital, Bombay in the early sixties. Since his return from abroad in early fifties, he was doing Plastic Surgery work under Department of General Surgery.

In this connection it may be added that the development of Plastic Surgery in India would not have been possible but for the untiring efforts of Sir Harold Gillies, Mr. E.W. Peet of Oxford and Sir B.K. Rank of Australia. As a matter of fact, no chronicle of Plastic Surgery in India can be written without paying homage to these dignitaries.

After the pioneering units at Patna and Nagpur, Calcutta and Lucknow were the next to develop. During the early phase, any progress was However very difficult.

Late Mr. E.W. Peet of Oxford had repaired the Clerft lip and palate of the relation of Late Dr. C. Pinto and was a regular visitor to K.E.M. Hospital, Bombay where third Plastic Surgery Unit was established in 1961.

FIG. 9 - Photograph of Dr. C. Pinto



Development of the speciality of Plastic Surgery was generally frowned upon and frankly discouraged. Little did these people, who opposed the development of the specialities realise that it was no longer possible for anyone, howsoever talented he might be to do equally well in all sections of vast surgical field. Patients started to realise this fact pretty soon by comparing the results of those who were doing full time plastic surgery work against those who were jack of all.

The Author, after 5 year Post graduate training in various British Centres of Plastic Surgery, Maxillo-facial Surgery, Burns and Hand injuries while working in the United Kingdom, was interviewed in India House, London, and was selected for the post of Reader in the upgraded Department of Plastic Surgery at Medical College, Nagpur, in 1960, on the pay scale of Rs. 500 - 800. With three advance increment which were so generously offered by the Government of Maharashtra, on recommendation of Public Service Commission. He joined as Reader in the Department of Plastic Surgery at the Medical College Hospital, Nagpur, in January, 1961. Author gratefully acknowledges the help and guidance he received from time to time from Prof. Balkrishnan. Author has immense respect for this great teacher, who had completely adopted himself to local Indian conditions and yet had maintained norms of International Standards in achieving results of International quality under most difficult conditions.

FIG . 10 - Photograph of Annual Meeting at Baroda (December, 1961) gathering of Plastic Surgeons of the country.

Author and Dr. R. J. Maneksha were added to the list of Council of Members at Baroda Conference in 1961.

First batch of Post-graduate students trained in our country appeared for their first examination from Nagpur and Patna Universities in 1963. Author happens to be the first external Examiner at the very first Plastic Surgery examination held at Patna.

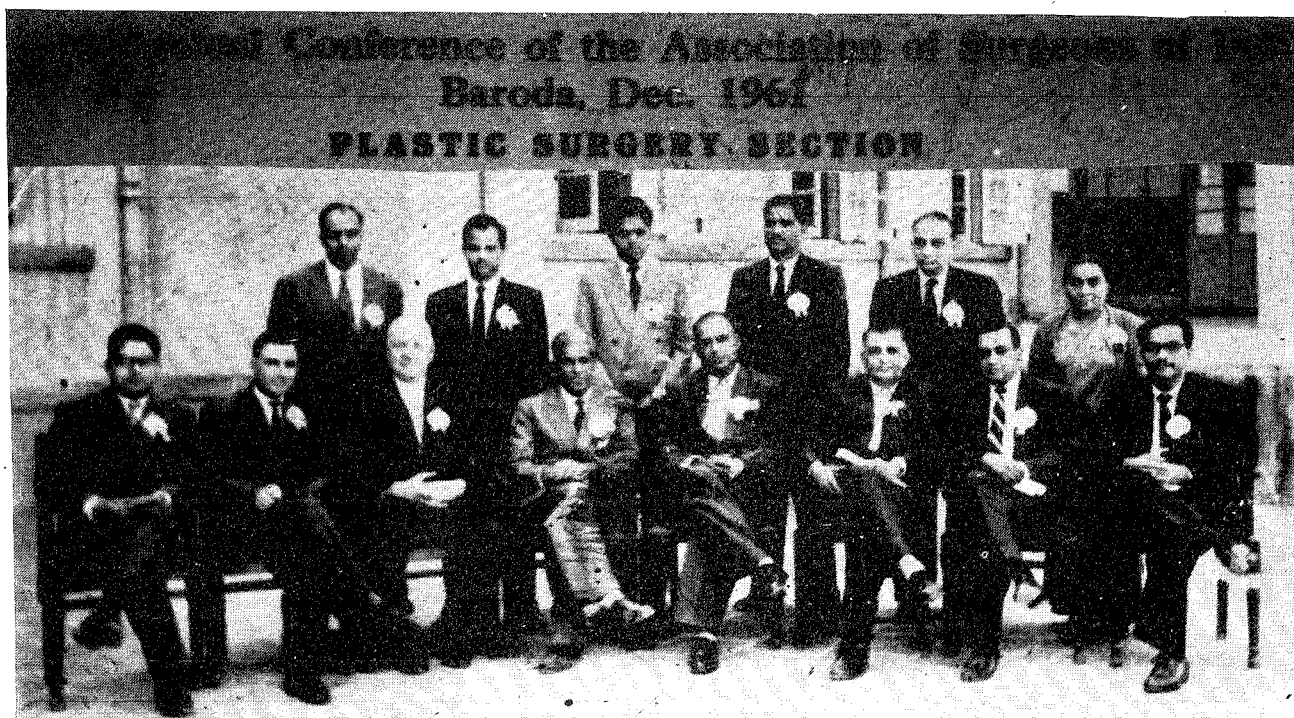
First Summer Conference was held at Nagpur in 1964.

**Both the firsts go to Nagpur, i.e.**

1. Formation of Association of Plastic Surgeons of India; and
2. Holding of the first Conference of the APSI - a Section of Association of Surgeons of India.

The outstanding feature of this Conference was the brilliant presentation by Dr. C. Balkrishnan. The classification of Congenital lip and palate, now known throughout the country as "Nagpur Classification".

In 1963, Safdarjung Hospital - a premier Medical Institution in Delhi, decided to start a Department of Burns and Plastic Surgery and Maxillor-facial Surgery. This Department by dint of hard work and dedication of a team of workers became in a short time a major unit of Plastic Surgery in India and is considered as an excellent and largest burn centre in the country. Author had the honour to start and develop and be its first Head.



In 1964, first Post-graduate Medical Education Conference was convened by the Medical Council of India under the Chairmanship of the then Union Minister of Health - Dr. Sushila Nayyar, at Delhi. She had called this meeting to standardise details of Post-graduate studies of different specialities and bring in uniformity in courses of Post-graduate studies. Dr. Nayyar being herself a Medical Post-Graduate felt dissatisfied with the multiplicity of courses of different Universities and lack of uniformity amongst them and also the manner in which Council was performing its functions. She was keen to streamline the Postgraduate Medical Education and wanted to provide a common syllabus for entire country, which was then to be carefully supervised by the Council.

From 1957 onwards, large number of Indian Medical Post-Graduates were coming back from abroad after obtaining specialised training in Neurosurgery, Plastic Surgery, Cardio-thoracic Surgery and traumatology etc. This threatened the entrenched interest of General Surgeons. They were unwilling to yield ground and did not like separation of specialities from their "Lordships". They did not want post-graduation to start in these specialities and if started at all, wished it should be permissible only after candidate obtained post-graduate qualification in General Surgery. They were determined to put many other obstacles to effectively stunt the development of super-specialities. Under such duress the under-mentioned National Representatives attended the Post-Graduate Medical Education Conference, the deliberations of which form an important record in the office of the Medical Council of India at Delhi :

	Dr. C. Balkrishnan	Covener
	Dr. N.H. Antia	Reporter
Late	Dr. R.N. Sharma	Speaker
Late	Dr. M. Mukherjee	Speaker
Late	Dr. R.N. Sinha	Speaker
	Dr. J.L. Gupta	Speaker
Late	Dr. C. Pinto	Speaker

Dr. R.L. Manachanda and Dr. R.K. Keswani from Patiala joined as Observers.

This Conference was a hallmark in laying down future guideline, the physical standards and criteria, the teaching requirements, the course and Curriculum leading to the Degree of M. Ch. in Plastic Surgery in the country. This is being followed as such to date.

It is true that ours is a broad verticle speciality and not a regional one like Neuro, Chest or Genito-Urinary. Some of above have started Five-Year straight course without M.S. in General Surgery. This fact has also been mentioned by Dr. C.R. Sundra Rajan last year. However, it is for the present teachers to confer and decide on the future training programme and course to be taken.

There is very little exposure of Plastic and Reconstructive Surgery at the under-graduate level. Here, one must compliment our orthopaedic colleagues who with great wisdom and unanimity have achieved whatever they wanted for the benefit of the students and also in getting recognised their discipline as a broad speciality.

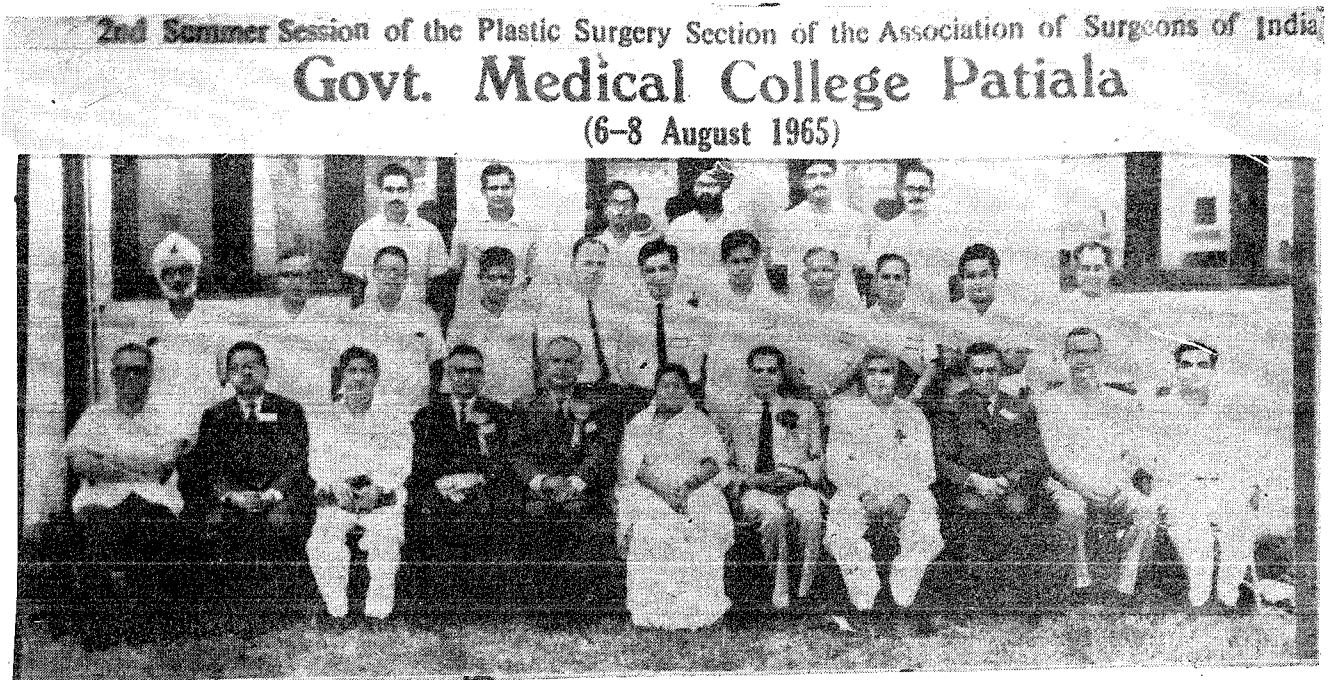
The Conference of A.S.I., which was due in December postponed due to Indo-Pak conflict, was held in Delhi in March, 1965. Late Dr.M.Mukerjee took over as the President and Late Dr. C. Pinto as the Secretary.

FIG. 11 - Photograph of Dr. M. Mukherjee





FIG. 12 Photograph of 2nd Summer Session of the Plastic Surgery Section of the Association of Surgeons of India - Govt. Medical College Patiala, Aug. 1965.



Seating Left to Right :

Dr. M.B. Wagle, Dr. J.L. Gupta, Dr. M. Mukherji, Dr. N.H. Antia, Dr. R.N. Sinha, Hon'ble Smt. Om Prabha Jain, Health Minister Punjab, Dr. R.L. Manchanda, Dr. Tulsi Dass, Dr. C. Pinto, Dr. K. Scott, Dr. R.K. Keswani.

Standing 1st Row :

Dr. G.S. Sekhon, Dr. R.L. Chopra, Dr. S.H. Kanwar, Dr. I.K. Dhawan, Dr. R. J. Garst, Dr. M.H. Keswani, Dr. K.S. Goleria, Dr. M.L. Saggna, Dr. S.C. Almist, Dr. Banerji, Dr. D.R. Gulati.

Standing 2nd Row :

Dr. C.G. Sharma, Dr. Satya Prakash, Dr. S. Sidhu, Dr. Rajinder Singh, Dr. Kaul, Dr. S.K. Soni.

#### DECEMBER, 1966 : MANIPAL

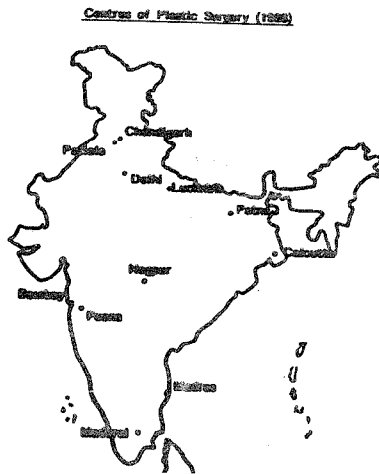
Late Dr. R.N. Sharma became President and represented our Association with its changed nomenclature i.e. "Association of Plastic Surgeons of India" from Plastic Surgery Section of A.S.I., at Rome in 1967 and thus we became a Member Association of the International Confederation of Plastic Surgeons - the status which we enjoy to this day.

FIG. 13 - Photograph of Dr. R.N. Sharma



In 1967, the Author took over as the fourth Secretary-cum-Treasurer from Dr. C. Pinto. By that time the Association had grown to about 66 Members including 37 full members.

FIG. 14 - Photograph - Map of India showing Plastic Surgery Centres in 1968.



During the author's long tenure as Secretary and the Vice- President and President, Dr. C. Pinto, Dr. R.L. Manchanda, Dr. R.J. Maneksha and Brig. Ganguly were elected to the office of the President of the Association of Plastic Surgeons of India respectively.

FIG. 15 Photograph of Late Dr. R.L. Manchanda



In last three decades, growth of Plastic Surgery has been satisfactory. There has been increase in the number of teaching centres in addition to service centres.

A few specialised centres of International quality for Hand injuries, Craniofacial surgery, Micro vascular surgery and Aesthetic surgery have emerged by dint of hard work of the individuals who head them.

There has been significant advancement in the tools and materials in the shape of :

1. Disposable dermatome blades and various electric dermatomes.
2. Implants and synthetic materials.
3. Modern Tissue expanders.
4. Fine suture materials and their various varieties.
5. Fibre-Optic Endoscope.
6. A.O. equipment and compression plates
7. High speed pneumatic drills for Maxillo-facial surgery and Craniofacial surgery.
8. C.T. Scan, M.R.I. Scan, Nuclear Scan etc.
8. Special suction machines and Cannulae for Lipo-suction.
10. Modern sterilisation techniques and newer Anti-microbial Agents.
11. Laser
12. Literature and text books in plenty and scientific journals.

Future planning, the Author feels, should be on the following lines :

- A :
1. Plastic Surgeons should be associated in the teaching of under- graduates in the field of Trauma, Burns, Plastic and Reconstructive Surgery, Maxillo-facial Surgery, Congenital deformities and acquired deformities, following cancer excision, thermal and crush injury.  
This exposure to the undergraduate students should be compulsory and should be made mandatory by the Medical Council of India.
  2. Every Medical College should have a Department of Plastic Surgery headed by a teacher with adequate supportive Medical and Para-Medical staff to cater to Burn injuries and Accident cases. An accident or burn injury patient should be able to reach such a Centre without much loss of time and by spending reasonable amount on transport. It will incidentally provide job opportunities for the younger generation who opt for service and teaching.
  3. A minimum of one month's posting of Under-graduate students should be made mandatory in the Department of Plastic Surgery.
  4. Plastic Surgeons must be associated both in theory and practical examination at the under-graduate level.



5. For post-graduate training in Plastic Surgery leading to the M.Ch. degree in Plastic Surgery, one of the existing Department of Plastic Surgery in a Medical College of the State should be up-graded to undertake this programme. This will be a Regional Centre for that State and should be suitably selected.

6. We must debate in our mind the position of Plastic Surgery as super-speciality versus broad speciality. The scope is literally from head to foot. It is unique in that it spans the whole body and does not have a defined anatomic area. In earlier days an M.S. in General Surgery held an excellent exposure to all systems and entire body and to all branches like head injury, Chest injury, Pediatric Surgery, Orthopaedics and Urology etc. as these specialities did not exist and were looked after by the Department of General Surgery or were in the process of development and were still a part of Surgery. Now with the development of these specialities and their independence "rightly so", the exposure of a Trainee in the present set-up in General Surgery is quite inadequate and very limited. On the other hand, a good training and exposure to the entire body was considered "As an essential pre-requisite qualification before super-speciality like M.Ch. in Plastic Surgery. Therefore, it is very urgent that the training programme/curriculum is carefully and critically reviewed before irreversible and serious harm is inflicted to the entire country.

B : 1. Every District Hospital should have a Plastic Surgeon to provide specialist cover to the poor, needy and the deserving, particularly burn injuries and accident, both road and industrial.

There is a vast tract of the country, which remains totally uncovered by any semblance of Plastic Surgery services, whereas, for example, Maharashtra State has not only pioneered Plastic Surgery in India but has the largest concentration of Plastic Centres in one State. In other words, the distribution is not uniform.

2. We must use the limited existing resources of the country to the maximum utility and provide essential Plastic and Reconstructive Surgery services rather than services which are not the need of the hour. There is tendency amongst many of us to be swept away by the glitter of western countries and what they are doing. We have perhaps failed to properly conceptualise the requirement of our society. Most of us concentrate our efforts to the needs of modern sector. The traditional sector appears to have been ignored. This to the author's mind is an unhealthy situation

and needs attention.

- C. 1. There is another field in which we have made no or little progress. It is the field of Research both basic and applied. This remains a major task to accomplish in the future.
2. There is, however, flea in the ointment, both in terms of quality and quantity. Our teaching and training programmes need to be re-oriented and designed afresh. The author would prefer to call Plastic Surgery as a broad speciality and a Plastic Surgeon as a "very specialised General Surgeon". First generation of Plastic Surgeons faced difficult problems and have braved the storm and brought us to a calmer waters. It is for the present generation to land at the seashore with safety and applause. The author is very hopeful that this challenge will be met by the present generation of Plastic Surgeon, who have great potential.

It will be foolhardy to speculate "which direction Plastic Surgery will take us in the future". Could any one have guessed the turn Plastic Surgery has taken in the past two decades? Microsurgery, Free tissue transfer, Axial pattern, Facio-cutaneous and Myocutaneous flaps, Suction assisted, Lipectomies, Cranio-facial Surgery are but a few examples. Author wishes to refrain from the flight of fantasy and from making wild guesses.

One, however, is hopeful of better efforts in reducing human suffering by ever better techniques and harnessing of better technologies in pursuit of achieving excellence.

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