

Fate of medical dermatology in the era of cosmetic dermatology and dermatosurgery

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“The practice of medicine is an art, not a trade; a calling, not a business; a calling in which your heart will be exercised equally with your head.”

- Sir William Osler

Dermatology is one of the many medical specialties, which evolved from the general internal medicine during the course of nineteenth century. In the beginning of 20th century, dermatology was well established as a separate discipline in Europe and United States; however, in India it was only after 1960s that it started getting the recognition as a specialty. Until recently, dermatology remained a purely medical field in India, although our Western counterparts have been working on its surgical dimensions. In India, the last 15–20 years have witnessed a tremendous growth in its surgical component and dermatologists have widely adopted various surgical and cosmetic procedures in their clinical practice and associations like Association of Cutaneous Surgeons of India (ACSI) and Cosmetology Society – India (CSI) have been established.^[1]

WHAT IS HAPPENING?

In India, dermatology is becoming one of the most competitive residency program to enter for the past several years and each year, all dermatology residency positions are quickly filled with the top scorers. Among medical graduates, this specialty is now no more a subject of ‘no other choice’ rather it has become the ‘subject of choice’. The awareness about the impact of

skin diseases and the crucial role of ‘skin specialist’ is growing not only in general population but also among colleagues from other specialties. With the constant increase in demand of specialists in dermatology and the residents having ‘controllable lifestyle’ away from the primary care fields, there are more dermatology residents than ever. With this strong academic strength of young dermatologists in India, there should be no lack of intellectual curiosity, which should initiate the induction of more of them in basic dermatology. Unfortunately, this is not the current trend. In many settings, cosmetic and dermatosurgery procedures are supplementing the basic dermatological care but in others they are nearly replacing it. Though training in dermatologic and cosmetic surgery is now an integral part of the postgraduate training in dermatology, as more trainees pursue surgically oriented fellowship trainings, the proportions could continue to evolve in favor of surgical component of the specialty.^[2]

Shortage of academic dermatologists in the workforce has been noticed worldwide.^[3,4] In United States, ever since 1970s, there has been a shortage in the field of academic dermatology, which is still growing. In a 1977 report, there were 338 full-time academic dermatologists in the United States and in 2004, this number was only 982.^[5] More than one-quarter of dermatologists in United States now spend less than half of their time with patients having medical dermatologic conditions.^[6] A similar concern about the reduced availability of academic dermatologists has been expressed in UK.^[7] Limited growth in the medical dermatology workforce has occurred at a time when increasing need for dermatologic services is being felt for an enlarging and aging population. In countries like United States, patients seeking a cosmetic botulinum toxin injection have more rapid access to dermatologists than those seeking both routine and urgent dermatology appointments.^[7]

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These tremors are felt more at times when there is explosion of knowledge on molecular/genetic basis of diseases and fast emerging advanced diagnostic and treatment modalities are becoming available (like immunomodulatory drugs, biologicals, gene therapy, novel drug delivery systems, stem cell revolution, etc.), which have increased our ability to improve care of our patients and are having a profound impact on the practice of dermatology. This drift of interest of the dermatologist toward dermatosurgery and cosmetic dermatology is occurring even when medical dermatology has yet to achieve the pinnacle of excellence, especially in India. The effects of tedious and slow growth of medical dermatology have been amplified by a broadening scope of practice into surgical and cosmetic dermatology.

There will more likely be many ill consequences of this 'shortage' of academic dermatologists. Primarily, it will adversely affect patient access to basic skin specialists and hence affect the quality of dermatological care as more and more dermatologists increase their time spent in surgical and possibly cosmetic dermatology. Other possible fall out could be an increasing dependence on nondermatologists and quacks for treatment of skin diseases. As patients and referring doctors have to face increasing delays in access, there has been a substantial influx of other clinicians into dermatology offices.^[8] Recently, some allied specialists like immunologists, rheumatologists, geriatric care physicians, etc. are extending their domain in managing many skin conditions. Our infatuation with cosmetic dermatology and a developing tendency of refraining from 'dry' more challenging and less lucrative basic dermatology, more legally hostile environment of healthcare management, and the encroachment by other medical specialties, may ultimately reduce resources for research and lead to trivialization and marginalization of the specialty.^[9] This will also adversely affect the basic research and other academic activities in the medical colleges and institutions. It may add to the frustrations of a 'difficult skin patient' seeking basic dermatological care. Other medical specialists may also experience sad results of this trend, which frequently seek advice for quality diagnosis of many patients or for an immunocompromised host with 'some skin rash'. If fewer dermatology residents are pursuing careers in medical dermatology and clinical research, where will the next generation of clinical investigators and scientists come from? Will there be sufficient numbers of academic dermatologists to train future generations

of dermatology residents?

WHAT ARE THE REASONS?

This fascination for cosmetic surgery appears to be mainly driven by the increasing demand for cosmetic-related dermatologic problems, or problems purely related to body image with the desire to look more beautiful.^[4] Though practiced earlier also, the enhanced desires to always look young and delay the normal processes like aging, dermatologic surgery in this process has also been rejuvenated.^[10] This trend has been observed in many developing nations as well. Dermatologists selectively improve access for these patients because of higher relative payments for cosmetic services. Physicians try to schedule these patients more quickly lest they lose interest. While medical dermatology is indeed challenging for accurate diagnosis and proper treatment, with many difficult to treat and incurable conditions; dermatosurgery and cosmetic dermatology, however, are seductive for dermatologists with faster and advertisable/demonstrable results and higher earnings.

Over the last three decades, with advances in our specialty, residents may have had broader experiences in basic and clinical research, specialty clinics, and academic philosophies; however, these may not have been appealing enough to the residents in motivating them to opt for medical dermatology. Perhaps more vocal academicians are needed to influence more residents to nurture medical dermatology practice.

In a survey, many chairs and chiefs agreed that too much time spent in patient care leaves little time for academic pursuits.^[11] Buckley *et al*,^[12] reported that academic physicians spending greater than 50% of their time seeing patients have cited insufficient time for the activities of research, teaching, and mentoring needed for a successful academic career. They also reported the expressed dissatisfaction by the residents with their careers, slower career progress, and that they were less likely to be at the rank of professor. If jobs of academic dermatologists are becoming more and more like private practice, with little or no time for academic pursuits, the greater income potential and autonomy afforded by a private office setting may appear more attractive. A report of two surveys in 1984 and 1989 showed that new graduates who entered private practice saw three negative factors about academics: restricted income, lack of 'control', and the political

climate.^[13] Perception of a restricted income was the strongest negative factor, which probably must have magnified many times now 18 years after this report, with higher medical education costs and the attraction for cosmetic dermatology at its peak.^[14] The demand–supply phenomenon is growing fast and recent years have witnessed enormous investment and promotion by beauty-care product industry all over the world. In major international dermatology conferences the leading cosmetics and medical lasers companies are the biggest sponsors.

DERMATOSURGERY AND COSMETIC DERMATOLOGY IS NOT A LESS SCIENTIFIC SUBSPECIALTY

It is not contentious that cosmetic dermatology and dermatosurgery is less intellectual than the real, ethical, and even moral practice of medical dermatology. Dermatosurgery procedures, like every other aspects of dermatology, involve careful analysis of the patient in order to make a proper evaluation. We know that it may be possible to train a preschooler to aim a laser at a patient's face, however, making sure that the appropriate laser is being used with the appropriate settings for any patient or selection of a most appropriate dermatosurgery procedure for a particular condition will require years of training and thorough understanding of cutaneous anatomy, biology, pathology, and pharmacology. Advancing the frontiers in areas like laser, Mohs' surgery, soft tissue removal and augmentation, and hair transplantation, dermatosurgery is a rapidly growing field and also offering bountiful research opportunities. Undoubtedly, a dermatologist with balanced and adequate knowledge of all subspecialties with a strong foundation of basic dermatologic science will certainly be in a better position to manage a patient than those with a focused approach on instruments and machines.^[2,15]

For better or for worse, we must accept that dermatology is now partly a surgical field. The issue is not whether dermatologists should or should not perform surgery but that they should be competent to do so. Dermatology residency should be restructured so that an appropriate time is devoted to dermatosurgery to enable residents acquire correct skills and experience. Patients may be better served by a dermatologist with surgical acumen who is able to provide all their dermatologic care, thus eliminating the need for frequent referrals to a surgeon.^[16] Nevertheless, the place of medical dermatology is indisputable and the growth of any

subspecialty including dermatosurgery and cosmetic dermatology should not be at its expense.

WHAT CAN/SHOULD BE DONE?

What are the solutions to halt this declining interest in medical dermatology? It appears that there are two separate problems which need attention: attracting new graduates to academic dermatology and then retaining them, the latter may be the more pressing of the two.^[17] A way to better reimburse academic dermatologists must be found, in order to lessen the widening gap in incomes between academics and private practice.^[18] For the others, efforts should be directed to those factors that are easier to correct. These include improving residents' perceptions and experiences with effective mentors, role models, and career guidance.^[19] Are we providing appropriate role models for the trainees? Is it a lack of exposure to the different career opportunities that has resulted in this narrowing of focus? It is not surprising that many residents would choose not to pursue a career in academic dermatology if they are unaware of what that career can lead to. As a community, we need to be more effective at communicating to our residents the excitement and value of discovery and the challenging and fulfilling career that awaits those who choose to pursue this career option. We must continue to communicate with, recruit, and mentor our younger colleagues to ensure that past successes continue in the future. We also need to identify residents interested in research or academic dermatology early in their residency training. Academic dermatologists should look for opportunities within the clinic to demonstrate to their residents the value of research relevant to patient care. Efforts should be made for retention of suitable talent, providing a more nurturing and congenial environment, and to improve job satisfaction both in terms of availability and promotion.^[20] Dedicated academic dermatology centers of excellence are necessary to promote research on skin biology, propagate skills of medical dermatology and therapeutics, establish referral centers for patients with rare skin conditions, and to ensure the best training for the next generation of dermatologists.

CONCLUSION

Medical dermatology has flourished tremendously over the past 50 years, however, the recent trend of disproportionate growing interest in dermatosurgery

and cosmetic dermatology among graduating residents and those practicing dermatology threatens to undermine this glorious record and the future of our specialty. There is a significant loss of interest in academic career by dermatology residents. Some important reasons are poor financial reimbursement in practice of basic medical dermatology, lack of mentors, role models, and career guidance. Strategies should be developed to cultivate future researchers and teacher-clinicians. Dermatotomy and cosmetic dermatology are now integral part of dermatology science and efforts should be made for the further progress in this field. However, we as a dermatologist community must understand the importance of 'medical dermatology,' ensure that further research, discoveries and therapeutics continue to evolve and appropriate dermatological skills are nurtured, lest they are lost in the glitters and glory of dermatotomy and cosmetic dermatology. Let us try to strike a judicious balance between academics and cosmetology.

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