Women Leadership in Dermatology: Moving Towards Gender Equality

Introduction

The recent decades have seen a fantastic change for women in the medical profession with a steady increase in the number of female medical students who represent around 50% of students in medical schools in the United States today.[1] However, we can observe that this influx has not been accompanied by a similar increase of females in medical, academic, and leadership roles. This paper will attempt to analyze these disparities and define the need for gender equality in medical professions, with special emphasis on dermatology.

Gender definition by World Health Organization

Gender is a concept with several facets: roles, behaviors, activities, attributes, and opportunities, which are considered to belong to girls or boys and women or men. It is not a binary but a multidimensional phenomenon. Although it is not a binary phenomenon, it is traditionally the expectation for women to be more caring and nurturing homemakers, whereas men take up space outside the home in the workplace. Gender equality sees people of all genders have equal rights, responsibilities, and opportunities. In societies with gender equality, we observed reduced violence against women, better economic circumstances, and a healthier and stable way of life.

Despite the strong shift in the professional space, with both men and women enjoying work opportunities outside the confinement of home life in most countries, the stereotypes, discrimination, and marginalization persist. Women still have many hours of unpaid work at home, in addition to their hours of outside work, for which they are paid lower wages and salaries than their male counterparts, the difference of income being in average of 20–30% in medical professions. According to Medscape's 2019 report, male primary care physicians earned about 18% more than their female colleagues in 2018.[2] At a global level, women in the health workforce, in general, earn 28% less than men, and 34% less in India.[3]

The History of Women in Medical Profession

During the 19th century, there were almost no female doctors; women were not allowed to study medicine, travel anywhere by themselves alone to medical schools or hospitals, or see and treat patients in medical spaces. The first female physician to graduate from a US medical school was in 1849.[4] Later, during the second half of the 19th century, very few women had access to medical training that allowed them to practice. In 1970, in the US, fewer than 8% of physicians were women. The first Indian woman physician, Anandibai Joshi, graduated in 1886.[5] In the late 20th century, and during the last two decades, a higher proportion of women entered the medical profession. In the UK in 2016, 57% of consultants and 75% of higher specialty trainees in dermatology were women.[6]Despite the increased significant presence of women in academic positions, their access to the highest positions is still limited. According to the data collated by the US Department of Education, women make up 50% of assistant professors but only 45% of associate professors and just 32.5% of full professors.[7]

The reason for the reduced proportion of female professors in academia globally may reside in the fact that female dermatologists do not publish their research works as intensively as men and experience anxiety because of domestic expectations and the difficulty of balancing academic pressures with the social conventions of families. We may also consider the reasons to be due to inadequate mentoring for women, lack of female role models, the competitive disadvantage for women to obtain grants, women being less likely to obtain research funding, having less ambitious career objectives than men, and self-censured aspirations or lack of autonomy for women. All these factors affect women's career trajectories.

Gender Equality in Medical Professions

Gender equality is essential when dealing with representatives of the pharmaceutical industry; female practitioners require adapted equipment, and if the development of medical devices does not consider the size of female hands, and the physiologic strength of women for given surgical tools or devices, there is an increased risk of musculoskeletal injuries compared to their male counterparts.[8] Another aspect of gender inequality in medicine resides in the different outcomes of patients according to the gender of the practitioner. One study showed that patients with acute myocardial infarction had a higher mortality rate when treated by a male doctor than when treated by a female doctor; however, this effect was reduced when the male doctor had a feminine team.[9]

Females in the Medical Specialties

A recent study on medical specialties in the UK has shown that 58% of consultant physicians, with a minimum of 8 years of training, are male.[10] The only specialties in the UK where there is an even gender split are rheumatology and hematology (50% male and 50% female). However, for palliative medicine and clinical genetics, 78% are female specialists in the UK. Dermatology remains one of the three specialties with the highest percentage of female trainees. In 2019, women made up 46% of active Graduate Medical Education (GME) trainees in all specialties and subspecialties in the USA. A US study showed that the larger percentage of women were found in these

specialties[11]: Obstetrics and gynecology (83%); allergy and immunology (74%); pediatrics (72%); medical genetics and genomics (67%); hospice and palliative medicine (66%). and dermatology (61%). Consequently, orthopedic surgery, neurology surgery, and interventional radiology are the specialties where women are the most underrepresented, with over 80% of men in these fields, and over 70% of men in the fields of thoracic surgery, pain medicine, and radiology. We see a near equal mix of men and women in specialties such as sleep medicine, preventive medicine, pathology (anatomic and clinical), and psychiatry.[11]

Women in Dermatology

In the USA, the first female dermatology specialist with an academic position was Daisy Maude Orleman Robinson, a practicing dermatologist and lecturing professor of dermatology in New York. It is only during the last three decades that a substantial entry of women in the field occurred. However, only 17% of women in 2012 held a full dermatology professorship status.[12] In dermatology, program directors are approximately two-thirds the rate that would be anticipated for their age cohort. Consequently, the number of female program directors is much less, making it difficult for young female physicians to have female role models and mentors who can support and encourage their development.

In a cross-sectional study performed in the USA, one major physician-focused medical society for each of the 43 medical specialties was identified.[11] It was observed that between 2008 and 2017, presidential leadership was held predominantly by men. The gap, negative difference, was at the largest in dermatology.

It is striking to note that in dermatology, female doctors devote more time to generous clinical and teaching activities than to the leadership of their specialty. This sustained underrepresentation in leading positions of the specialty may persist if no leading female role models pave the way for these strategic roles in the profession. Improvement of diversity and inclusivity in these leading roles is the only way to reach an equitable representation of women in medicine.

Female Scientific Visibility and Publications

Disparities are very evident when observing the gender of first authors in the medical literature. In 1976, a study was performed to evaluate female authoring manuscripts in three major dermatology journals (JID, JAAD, and Archives of Dermatology). Only 12% of dermatology papers with female first authors emerged.[13] In comparison with the proportion in 2006, recent years have seen a large increase of up to 48% of female first authors.

More recently, it was shown that the integration of female scholars is advanced in dermatology compared to other specialties.[14] For female scholars, there is an element of dichotomy in their careers where they choose either research or clinical. As a result of these disparities, particularly in some other specialties such as gastroenterology, the Lancet group of journals made a public commitment to promote gender equity, not only with authors and peer reviewers but also with their employees.[8]

Medical Doctors in India

Demography surveys in India show that there are 943 women for every 1000 men, with fewer females in cities versus rural areas. In India, 38% of women are health professionals in the fields of dentistry, nursing, and midwifery.[15] However, female medical doctors make up only 16,8% of all allopathic medical professions. This low proportion of female medical doctors is also found in Japan, where only 18% are female. It seems that Asian countries, now influenced by western gender balance in medicine, are slowly beginning to shift. In medical schools in India today, 55.2% are males and 44.8% are females.

The number of practicing doctors in India exceeds 1.2 million (2020). Data from the Maharashtra University of Health Science (MUHS) illustrated that the percentage of women in medical courses had decreased from 49.4% in 2015–2016 to 44.8% in 2018–2019. Almost 50% of females go straight into general practice after obtaining an MBBS degree as opposed to continuing postgraduate studies. These figures were compiled from the 39 medical colleges in India affiliated with MUHS. Recent figures of the gender ratio in medical practice are:

Medical students

Out of 5,130 students admitted to study MBBS at MUHS (India) in 2018–2019, 55.2% were male and 44.8% were female.[16]University admissions for post-graduate science programs in India saw 37% of women enrolling in PhD programs in the physical sciences in 2015–2016 and 33% in 2011–2012.

Academic doctors

In India, data showed that women constituted 50.6% of medical college admissions; however, a reduced figure of one-third continue to post-graduation and doctoral level.[17] Males represented 59.4% of medical doctors registered with the Health Professional Council of South Africa (HPCSA), with females representing 40.6%, resulting in a male-to-female ratio of 1:0.7.[18]

Teaching professors

A survey on higher education in India for 2018–2019 illustrated that out of approximately 14,16,299 teachers from 993 universities, 39,931 colleges and 10,725 stand-alone institutions, almost 58% were men. The survey also showed a ratio of 73 female teachers to 100 male teachers at the all-India level.[19]Women comprise only 15–20% of tenured faculty across research institutions and universities in India.[20]

Private practice

Women account for 17% of allopathic doctors in India. Only 6% of women practice in rural areas; less than 1 female allopathic doctor per 10,000 people (0.5). Female doctors per 10,000 population range from 7.5 in Chandigarh to 0.26 in Bihar.[17]

Figure 1: Dr. Hemangi Jerajani, first woman president of Indian Association of Dermatologists, Venereologists and Leprologists (IADVL) in 2010

Figure 3: Dr. Hemangi Jerajani and Dr. Michele Verschoore

Research medical scientists

A study of scientific publications of 2017, to identify male or female publishing imbalances in India, found that out of over 27,000 research papers that were analyzed, there was one female author for every three male authors. The study also showed that the female proportion pursuing tertiary education in STEM in 2017 was 42% in India.[21]

Professional associations representatives

The global gender gap report for 2016 showed that the representation of women on boards across countries was 14%.[22]

Indian Association of Dermatologists Venereologists and Leprologists (IADVL)

Dermatologists in India regrouped in an association called the Indian Association of Dermatologists and Venereologists

Figure 2: Prof. J. P. Ortonne, Dr. S.DN.Guptha, Dr. CR Srinivas (Past President IADVL), Dr. H. Jerajani (First female president IADVL) and Dr. M. Verschoore

Figure 4: 2019 Maria Duran Medalist: Dr. Hemangi Jerajani, MD India with Dr Mercedes Florez-White and ISD Secretary General,Dr Nellie Konnikov (2019)

in 1947, and later, the Indian Association of Dermatologists, Venereologists, and Leprologists (IADVL) in 1973.

The first female president of the association was Dr. Hemangi Jerajani, elected in 2010, she was the first female president of IADVL in its 50 years of existence [Figures 1–3]. It was Maria Duran, the first woman Secretary-General of International Society of Dermatology (ISD), who dedicated her life to women's health and women's advancement. She has been recognized for this legacy by giving her name to a prestigious medal, the Maria Duran Medal, Lecture and Fellowship, through the Maria Duran committee of International Society of Dermatology (ISD) [Figure 4].[23]

The second woman president elected in IADVL for 2022, in its 50th year is Dr. Rashmi Sarkar. Dr. Rashmi Sarkar, a Post Graduate Institute of Medical Education and Research (PGI), Chandigarh, alumni, has been a Senior (Director) Professor in five prestigious medical colleges in the country after her post-graduation in dermatology in 1995 from PGI, Chandigarh, India, and is currently a senior professor in dermatology, Lady Harding Medical College, New Delhi, India. She has been the first and only woman Secretary-General of IADVL (2014–2015) so far. She has served as the first International Representative, Board of Directors, Women's Dermatologic Society from India (2011–2013, 2017–2018) [Figure 5] and Vice President ISD (2017–2021). She has received the Member Making a Difference Award from the American Academy of Dermatology (AAD) in 2014 and 2015.

Figure 5: Professor Rashmi Sarkar, First International Representative, Board of Directors, Women's Dermatologic Society, India , President IADVL 2022

The Birth of Women Dermatological Associations

In the US, the first female practicing dermatologist was Dr. Daisy Maude Orleman Robinson, who started her career in 1904 in New York. It was more than 50 years later that the dermatology profession started to be feminized. It first appeared in Western countries and then reached Asia. In 1973, Dr. Wilma Bergfeld founded the Women's Dermatologic Society (WDS). Some of the main objectives of WDS were to encourage women to reach major elected offices at the AAD, to obtain grants, and to empower female dermatologists [Figures 6 and 7]. It was only 19 years later, in 1992, that Dr. Bergfeld was elected president of AAD, the first female to be elected president, 54 years after the creation of AAD [Figure 8]! Wilma F. Bergfeld, MD, one of only five women in her medical school class of 1964 and the third female in her dermatology residency program, was recently appointed junior clinical dermatologist and head of dermatopathology at the Cleveland Clinic in 2020.

Indian Women's Dermatologic Association (IWDA)

The Joint WDS-Indian WDS, a sister society of WDS was discussed with the leading women dermatologists of the US. It all started with the Joint WDS-Indian WDS

Figure 6: Dr. Wilma Bergfeld

membership or international chapter of WDS was created and approved at the 2012 WDS Business meeting in Annual AAD, San Diego, USA. It was introduced by way of a proposal submitted by the Founder President, Professor Rashmi Sarkar. A formal Indian Women's Dermatologic Association (IWDA) was registered in 2018 [Figures 9 and 10].

The birth and development of IWDA was supported by the enthusiasm of Dr. Michele Verschoore, who contributed to increase the recruitment of a large number of Indian women dermatologists [Figure 11]. Many events were then organized under the leadership of Dr. Rashmi Sarkar; different activities that created and strengthened the Indian female dermatology network, including symposia, lectures, social networks, and WhatsApp groups. There are around 100 members but a 250-female dermatologist's network informally through WhatApp groups. It was also envisioned to propose a specific program of empowerment for female dermatologists in India: the L'Oréal-IWDA Women Leadership Training Program.

IWDA - L'Oréal Women Leadership Training Program

Dr. Michele Verschoore knew that it would be meaningful and effective to stimulate gender equity transformation by increasing and empowering leading female positions of the profession, instead of waiting for an increased pipeline of higher leadership female dermatologists.

This led to a dedicated partnership, and a specific program "*Leading for the 21st Century for female dermatologists' empowerment*." This program was designed in a business school, directed by Niket Karajagi under the leadership of founder and president, Dr. Rashmi Sarkar and, Dr. Michèle Verschoore. The objectives of the "*L'Oréal Women Leadership Program*" include: creating the leaders of tomorrow, empowering female dermatologists, and reach fair gender representation in dermatology bodies in India. Every year, 5 to 10 young female dermatologists are selected [Figure 12]. After the first session of training in 2020, the quotes of the 2020 laureates are self-explanatory [Table 1]. This program is an example of the ideal representation of industry and public academic dermatology, and the long-term commitment of an industry in inclusivity and sustainable development.

The Future

The end goal is to empower more women to seize the political positions at national professional associations

Figure 7: Logo of Women's Dermatologic Society (WDS)

Figure 9: Initiative by IWDA under the guidance of Dr. Rashmi Sarkar, helping underprivileged girls at St. Michael's hostel for orphaned girls on the eve of International Women's Day, 2020

Figure 8: American Academy of Dermatology (AAD) Past Presidents: Lynn Drake, Wilma Bergfeld, Ron Moyer, Boni Elewski, and Diane Baker and others

Figure 10: Indian Women Dermatology Association (IWDA).

Table 1: The quotes of the 2020 laureates

"Women are their own glass ceiling"	"I could evaluate my strengths"
"I realized my shortcomings"	"Being a good doctor is IQ and EQ"
"It worked as a wakeup call"	"I was more on my duties, not on what I want"
"Such a learning experience"	"I see a new angle of vision"
"An empowerment based on emotional intelligence"	"I know now I was in my comfort zone"
"I feel a more effective leader"	"I want to go beyond"
	"I plan to go to some good persons to be my mentors"
"It has been an eye opener"	"My journey is different now"

Figure 11: Dr. Rashmi Sarkar and Dr. Michele Verschoore at International Summary Academy of Dermatology, Munich, 2017

for a fair and balanced representation of women in the country organization's governance. To achieve this, identification and training of promising young female leaders are essential. Commitment, generosity, care, and positive feedback are just some of the values, predominantly shared by women, necessary for solidarity within the sector. Solidarity is essential in a complex world, and such values are essential for a stabilized and well-balanced society.

Conclusion

Gender equality is essential for a safe and strong society, where respect, dignity, and fairness create an environment for the genders to thrive equally. Because the gender balance in Medicine has progressed over the last three decades, it is shocking to see that the gender balance is still very poor when observing academic and leadership positions. This creates a loss of opportunities for female doctors to be co-opted to higher responsibilities, to get funding for research, and to have access to a professorship. The transition toward fair representation in national dermatology societies was very recently done with success, thanks to a core group of female dermatologist leaders who

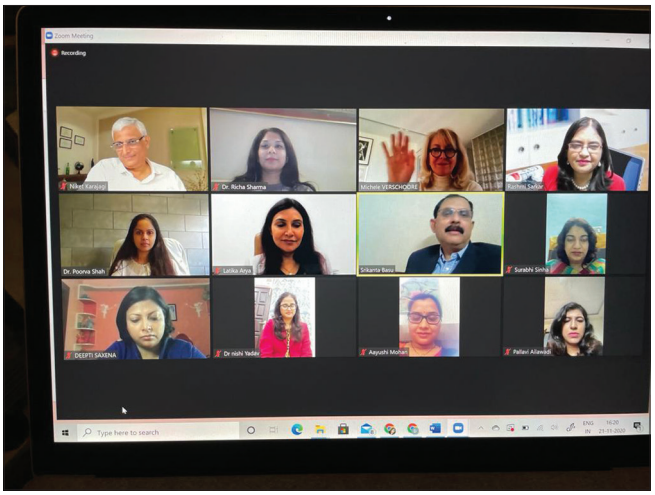

Figure 12: IWDA-Loreal Women's Leadership Award Virtual Ceremony

meet in women dermatology congresses, publish together, and take leadership roles in national associations.

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