

Women in Dermatology Leadership: Results from a Nationwide Survey

Abstract

Background: Significant progress has been made in the representation of women at various fronts in dermatology. Nonetheless, women fall far behind their male counterparts when it comes to leadership roles as indicated by recent research data. **Materials and Methods:** This was a cross-sectional study amongst 180 dermatologists. Anonymous surveys were sent to 300 dermatologists across India, in March 2021, consisting of 14 questions, discussed and made by the two authors, the senior author having held leadership positions in dermatology. **Results:** Amongst the 180 respondents, 79% were female, and 21% were male. Significant attrition of women dermatologists in academic institutions, with increasing experience in the field was observed. A higher percentage of men had been in a leadership position as compared to women. ($P > .05$). The majority of the female respondents agreed that women had to struggle more than men to be accepted as leaders. ($P < 0.05$) Most women reduced their working hours to cater to household responsibilities, and almost 70% of the women agreed to having experienced burnout as a result of low job satisfaction or an absence of work-life balance ($P < 0.05$). More women agreed to having faced discrimination at the workplace ($P < 0.05$). **Conclusion:** Gender-based gaps in dermatology leadership still exist with regard to the number of women occupying higher academic ranks. Possible solutions include gender sensitization, creating a room for equivalent leadership opportunities, mentorship and family support, which may help tip the balance in favor of gender parity in dermatology.

Keywords: Academics, dermatology, gender, leadership, women

Introduction

Leadership is the ability to “influence” people in order to maximize their efforts, towards the achievement of a common goal. Research confirms that most people do not distinguish between men and women occupying leadership positions.^[1] In spite of this, gender gaps still exist in the favor of men, and recent data indicates that men in leadership positions are perceived to be better when it comes to taking risks and negotiating profitable deals.^[1,2] Significant progress has been made in the representation of women at various fronts in dermatology. We now have platforms including the Women’s Dermatologic Society and the Indian Women’s Dermatologic Association (IWDA) dedicated to encouraging women dermatologists globally. Nonetheless, women fall far behind their male counterparts when it comes to leadership roles, as indicated by recent research.^[3,4]

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Aims and objectives

To determine the association between gender and professional or academic ranking, occupancy of dermatology leadership positions, work-life balance, sex-based discrimination at the workplace and evaluate the gender-based differences in perception regarding leadership in dermatology, leadership traits, and possible solutions to bridging the gender gap in this field.

Materials and Methods

Anonymous surveys formulated using google forms were sent to 300 dermatologists across India, in March 2021. The forms were shared online on various dermatology platforms via email and WhatsApp. These included full-time academic dermatologists, part-time academic, part private practice, dermatology residents, and those engaged in private practice. The survey consisted of 14 questions, all of which were multiple choice and mandatory. These were related to demographic characteristics, years in

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academic dermatology (AD) or practice, gender-based difference in leadership opportunities, and struggle related to work-life balance, and possible solutions. This was devised by the senior and junior author; the senior author having been in different leadership roles nationally and internationally as well as inputs from members of the IWDA, based on their experience and knowledge. Quantitative variables were expressed as mean \pm SD, and qualitative variables were expressed as frequencies/percentages and compared between groups using Chi-square test wherever applicable. All surveys were anonymously coded and entered into a spreadsheet (Excel 2021; Microsoft). The data were analyzed using statistical packages for the social sciences, and a P value <0.05 was considered significant.

Results

Out of the 300 dermatologists, 180 (60%) responded to the survey questionnaire.

Demographic and professional characteristics

Amongst the 180 participants, the majority i.e. 142 (78.5%) were female and 38 (21%) were male. Ninety-five (52.8%) respondents (82 women, 13 men) were private practitioners, and the rest 85 (47.2%) including 60 women and 25 men were affiliated with academic institutions (AI). (P value = 0.009) Most i.e. 65 (36.1%) of the respondents had spent more than 15 years in academic dermatology (AD) or private practice (PP) starting from the first year in residency, whereas 46 (25.6%), 47 (26.1%), and 22 (12.2%) participants had an ongoing career span of 11–15 year, 6–10 years, and less than 5 years, respectively. The maximum number of men ($n = 13$) had spent 11–15 years, and the maximum number of women ($n = 59$) had spent >15 years in dermatology. (P value = 0.007) [Table 1].

Out of the 7 men with more than 15 years of experience in the field, 6 (85.7%) were in AI, whereas 1 (14.3%) was in PP as compared to 59 women with the same career span where only 17 (29%) were affiliated to AI, and 42 (71%) were in PP, and this difference was statistically significant. (P value = 0.003) [Table 2 and Figure 1].

Leadership opportunity and leadership traits

Only 54 (30%) participants had been in any leadership position (head of the department, journal editor, committee or association head) as compared to 88 (70.2%) dermatologists with no such experience. The majority of the women i.e. 104 (73.23%) had not been in a leadership position as compared to 22 (57.89%) men. (P value = 0.066). Most 105 (58%) respondents felt that the majority of the leadership positions around them were occupied by men, whereas 67 (37%) thought that men and women had equal representation [Figure 2]. Maximum proportion i.e. 20 (52.6%) men felt that both genders were

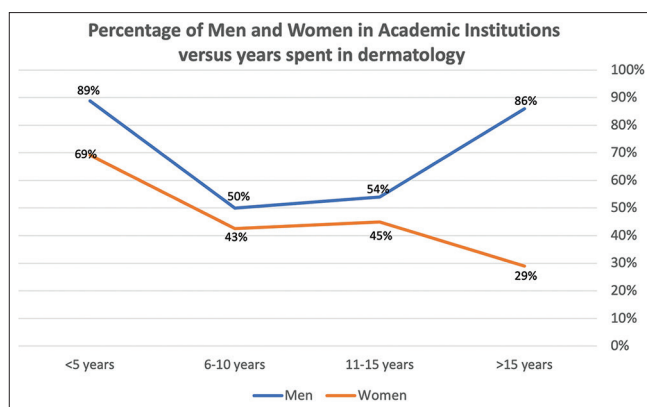


Figure 1: Percentage of men and women in academic dermatology with increasing years of experience: The gradual attrition of the number of women in academic institutions with increasing experience is seen

equally represented in leadership positions as compared to 47 (33%) women (P value = 0.069). Maximum number i.e. 110 (60.8%) participants thought that women had to struggle more as compared to men to be accepted in leadership roles, and 97 (68.3%) women respondents answered “yes” to the above-mentioned question, as compared to only 13 (34%) men. (P value = 0.001). When asked which gender performed better in leadership roles, 122 (67.4%) respondents said there was no difference between men and women, whereas 45 (25%) participants reported that women made better leaders, and only 14 (7.7%) mentioned that men were better. The majority i.e. 68% of both men and women participants agreed with gender neutrality in leadership. However, 7 (18.4%) men felt men did better as leaders as against only 5 (3%) women, whereas 40 (28%) women said females performed better in leadership positions as compared to only 5 (13.1%) men. (P value = 0.00176).

The participants were also asked which gender performed better in specific leadership traits [Table 3a and b].

In our study, intelligence was considered to be a gender-neutral (GN) trait by 127 (68%) participants including 101 (71%) women and 26 (68%) men (P value = 0.02). Most 95 (53%) respondents also agreed that providing fair wages to employees was a gender neutral quality (P value = 0.025). Women were reported to be better in traits such as negotiating (P value = 0.7) and honesty (P value = 0.4) by both men and women alike. The majority of the participants also considered women to be better in traits such as mentorship skills (MS) (P value = 0.006), organization skills (OS) (P value = 0.012), gender sensitivity (GS) (P value <0.00001), as well as compassion (CN) (P value <0.00001); however, the difference in the responses between both the groups were significant as most men considered women to be better mentors, whereas women deemed it a gender-neutral trait. On the contrary, men thought OS, GS, and CN as GN traits, whereas women disagreed and said that

Table 1: Professional Characteristics of 180 Respondents

Characteristics	Men n=38 (21.1%) Number (Percentage)	Women n=142 (78.9%) Number (Percentage)	P (P<0.05=significant)
Private Practice	13/38 (15.85%)	82/142 (57.74%)	0.009844 (P<0.05.)
Academic Dermatology	25/38 (65.7%)	60/142 (42.2%)	
Years in Practice/Academic Dermatology			
<5 years	9/38 (23.6%)	13/142 (9.1%)	0.00705 (P<0.05.)
6-10 years	10/38 (26.3%)	37/142 (26.0%)	
11-15 years	13/38 (34.2%)	33/142 (23.2%)	
>15 years	6/38 (15.7%)	59/142 (41.5%)	
Current Position			
PG Resident/Senior Resident	9	14	0.022279 (P<0.05.)
Assistant Professor/Associate Professor	11	26	
Professor/Director Professor	5	18	
Not Applicable/Private Practice	13	84	
Occupied leadership position			
Yes	16 (42.1%)	38 (26.7%)	0.066749 (P>0.05.)
No	22 (57.89%)	104 (73.23%)	

Table 2: Distribution of men and women in dermatology with increasing years of experience

	Men		Women	
	Academic Institution	Private Practice	Academic Institution	Private Practice
<5 years	8/9 (88.8%)	1/9 (11.2%)	9/13 (69.3%)	4/13 (30.7%)
6-10 years	5/10 (50%)	5/10 (50%)	16/38 (42.6%)	22/38 (57.8%)
11-15 years	7/13 (53.8%)	6/13 (46.1%)	15/33 (45.4%)	18/33 (54.5%)
15 years	6/7 (85.7%)	1/7 (14.3%)	17/59 (28.9%)	42/59 (71.1%)

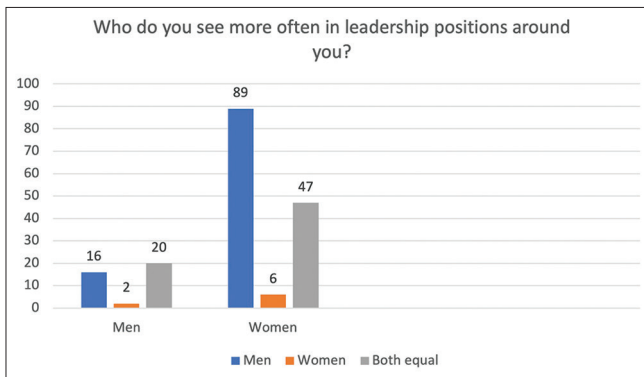


Figure 2: Difference in response to “Who do you see more often in leadership position around you ?” amongst males and females

women were better in all of these. Men were unanimously perceived to be better by both males and females in decision making (P value = 0.14) and risk-taking abilities (P value = 0.101 [Figure 3a and b].

Work-life balance and career satisfaction

Majority i.e. 128 (70.7%) dermatologists said that they had reduced or considered reducing their working hours in order to cater to household and/or parental responsibilities, whereas 53 (29.3%) provided a negative response to the question. Amongst these, the majority 111 (78.1%) of the women answered “yes” as compared to 17 (44.7%)

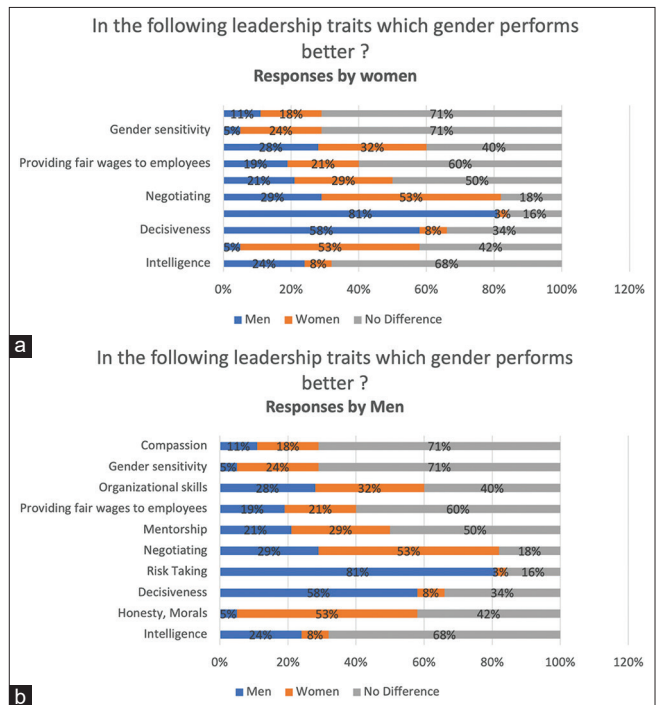


Figure 3: (a) Gender-based differences in leadership traits: Response by women. (b) Gender-based differences in leadership traits: Response by men.

men. (P value = 0.000054) [Figure 4]. Maximum number i.e. 90 (49.7%) volunteers thought that their partner could

Table 3a: Gender-based differences in leadership traits- Responses by men and women

Response	Intelligence	Honesty, Morals, Ethics	Decisiveness	Risk Taking	Negotiating	Mentorship	Providing Fair wages	Organization Skills	Gender Sensitivity	Compassion
Responses by women										
Men	13 (9%)	4 (3%)	59 (42%)	90 (63%)	32 (23%)	10 (8%)	11 (8%)	15 (11%)	4 (3%)	7 (5%)
Women	28 (20%)	91 (64%)	25 (18%)	10 (7%)	82 (58%)	75 (53%)	59 (41%)	67 (47%)	113 (79%)	108 (76%)
No difference	101 (71%)	47 (33%)	58 (40%)	42 (30%)	28 (20%)	57 (40%)	72 (51%)	60 (42%)	25 (18%)	27 (19%)
Responses by Men										
Men	9 (24%)	2 (5%)	22 (58%)	31 (81%)	11 (29%)	8 (21%)	7 (19%)	11 (28%)	2 (5%)	4 (11%)
Women	3 (8%)	20 (53%)	3 (8%)	1 (3%)	20 (53%)	11 (29%)	8 (21%)	12 (32%)	9 (24%)	7 (18%)
No Difference	26 (68%)	16 (42%)	13 (34%)	6 (16%)	7 (18%)	19 (50%)	23 (60%)	15 (40%)	27 (71%)	27 (71%)
P	0.021	0.4	0.14	0.101	0.711	0.006	0.025	0.012	<0.00001	<0.00001

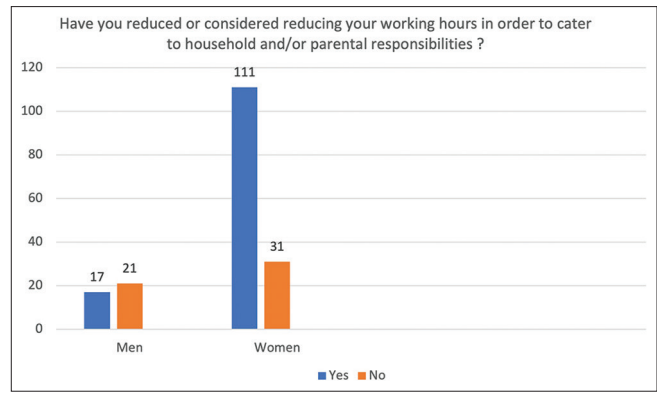


Figure 4: Response to “Have you reduced or considered reducing their working hours to cater to household and/or parental responsibilities?”

contribute more to household/parental responsibilities to improve work-life balance as compared to 53 (29.3%) who did not feel the same. The gender-based difference in the response was statistically significant (*P* value = 0.025) with 78 (54.9%) women and only 12 (31.5%) men marking “yes.”

When the participants were asked if they had experienced burnout as a result of low job satisfaction, a majority i.e. 82 (45.3%) said ‘no’, whereas an almost equal number 75 (41.4%) gave an affirmative response. Majority i.e. 67 (47.1%) women agreed to have experienced burnout as compared to only 8 (21.05%) men. (*P* value = 0.001329). A large proportion i.e., 82 (45.3%) respondents did not face discrimination at the workplace related to pregnancy or parental status. A large number of the women i.e., 50 (35.2%) women agreed to have faced discrimination as against only 1 (2.6%) men. (*P* value = <0.00001). Overall, the majority of the participants i.e. 85 (47%) chose “flexibility regarding schedules related to household work and parental responsibilities” to be the best possible solution followed by “assigning work and asking for help” which was opted for by 36 (19.9%) respondents. Mentorship, risk-taking ability, and willingness to accept failure and try again were chosen by 24 (13.3%), 19 (10.5%), and 17 (9.4%) respondents, respectively [Figure 5 and Table 4]. Flexibility regarding schedules related to household work and parental responsibilities were also the most common response chosen by 70 (66.3%) women and 14 (17.7%) men.

Discussion

Significant progress has been made in the representation of women at various fronts in dermatology. Whereas only around 7% of practicing dermatologists were women in the 1970s, this figure went up to 47.1% in 2015.^[4,5] Furthermore, during the same period, more than 64% of the dermatology trainees were women, and similar trends have now been observed in the Indian context.^[6,7] In spite of this progress, women fall behind their male counterparts when it comes to leadership roles, especially in the case of AD and association work.

Table 3b: Gender based differences in leadership traits- Responses by men and women

Trait	Overall Reponses	Responses by Men	Responses by Women	P
Intelligence	Gender Neutral (68%)	Gender Neutral (68%)	Gender Neutral (71%)	<0.05
Providing fair wages to employees	Gender Neutral (53%)	Gender Neutral (61%)	Gender Neutral (51%)	<0.05
Honesty, Morals	Women (62%)	Women (53%)	Women (64%)	>0.05
Negotiating	Women (55%)	Women (58%)	Women (53%)	>0.05
Mentorship	Women (52%)	Women (53%)	Gender Neutral (50%)	<0.05
Organizational skills	Women (45%)	Gender Neutral (39%)	Women (47%)	<0.05
Gender sensitivity	Women (77%)	Gender Neutral (71%)	Women (80%)	<0.05
Compassion	Women (69%)	Gender Neutral (71%)	Women (76%)	<0.05
Decisiveness	Men (44%)	Men (58%)	Men (42%)	>0.05
Risk Taking	Men (66%)	Men (82%)	Men (63%)	>0.05

Table 4: Possible solutions to bridging the gender gap in dermatology- Responses by men and women

	Results					Row Totals
	Flexibility regarding schedules	Willingness to accept failure	Mentorship	Risk Taking Ability	Assigning work and asking for help	
Men	14 (17.73) [0.79]	7 (3.59) [3.24]	5 (5.07) [0.00]	5 (4.01) [0.24]	7 (7.60) [0.05]	38
Women	70 (66.27) [0.21]	10 (13.41) [0.87]	19 (18.93) [0.00]	14 (14.99) [0.07]	29 (28.40) [0.01]	142
Column Totals	84	17	24	19	36	180 (Grand Total)

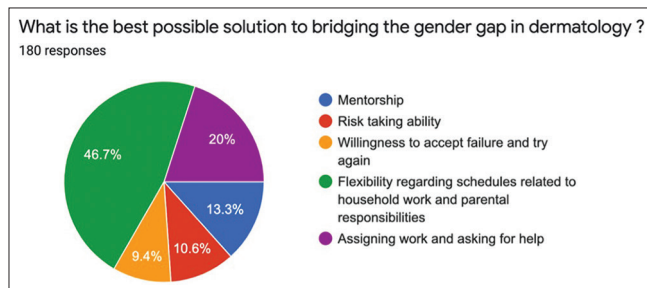


Figure 5: Possible solutions to bridging the gender gap in dermatology

Amongst 180 dermatologists who participated in the study, 79% were females 21% were males with a ratio of 3.7:1, and this may be attributed to the higher participation rate by women owing to the title and concept of the survey. Amongst the study participants, 65.7% of the men were affiliated to AI as compared to only 42.2% of the women, a difference that was statistically significant. Comparison of the data based on gender revealed that as the years spent in dermatology increased, the proportion of women in AD reduced from 69% (for those <5 years experience in dermatology) to 29% (for those with >15 years), whereas this downward trend was not appreciable amongst men. Similar findings have been reported by previous studies where women represented around 56%–61% of the junior faculty, a number which fell to a staggering 31% for women occupying senior faculty positions. Furthermore, the share of women occupying topmost positions in AD falls down to a dismal one-fourth of the total dermatology chairs.^[8,9]

In our study, the majority of the women i.e., 73.23% had not been in a leadership position as compared to 57.89% of men; however, this difference was not statistically

significant. Most (58%) dermatologists agreed that the majority of the leadership positions around them were occupied by men. However, 52.6% of the men felt that both genders were equally represented in leadership positions as compared to only 33% of the women, although the difference was not significant. This is also exemplified by the disproportionate representation of women occupying the topmost leadership position of associations such as the Indian Association of Dermatology, Venereology, and Leprology (IADVL), where only two women dermatologists have led the committee in the past almost 50 years.^[7,8]

In a study amongst 259 full-time academic dermatologists, men held more senior positions, and the difference was statistically significant.^[10] Various reasons have been cited to account for this underrepresentation of women in leadership positions. Data suggests that women may not be promoted at the same rate as men, in spite of logging in the same work hours and providing the same level of patient care.^[10-12] This attrition of women along the path from junior faculty positions to senior leadership posts has been termed “the leaky pipeline”^[10,11] Furthermore, a lower work satisfaction could manifest into a higher dropout rate, accounting for a lower percentage of women at higher academic ranks. Data from a study amongst 259 academic dermatologists revealed a significant difference in the dropout rate between both genders, with a 26.4% more probability of women leaving their academic careers as compared to men. The study also reported that a lower percentage of women were satisfied with their academic careers as against men.^[10,13]

Sixty percent (60%) of the participants in our study thought that women had to struggle more as compared to men to be accepted in leadership roles with 68.3% women

respondents in agreement with this notion, as compared to only 34% men. The majority i.e., 67.4% of both men and women participants agreed with gender neutrality in leadership, whereas 25% of the participants reported that women made better leaders, and only 7.7% considered that men were better. Similar results have been cited in a recent study, where almost 40% of the participants believed that women leaders are held to higher standards than men, have to do more to prove themselves, and family responsibilities also come in the way.^[1]

When asked which gender performed better with regard to certain traits as leaders, the majority i.e. 68% of both men and women participants said that intelligence was a GN trait. Overall, the majority of the participants thought that no difference existed between male and female leaders with respect to providing fair wages to their employees and with regard to honesty. Previous studies also confirm that most leadership qualities – honesty, intelligence, and decisiveness are in fact GN.^[1] In our study, the respondents felt that women were better in negotiating, honesty, mentorship skills, OS, GS, as well as CN. The results were similar to those of an online survey amongst 1835 adults where it was reported that women leaders were better at negotiating, being truthful, providing fair wages, and mentoring employees. Furthermore, women were considered more organized and more sensitive to identify gender discrimination in society.^[1] According to our results, men were perceived to be better in decision making and risk-taking abilities by both men and women. In a similar study amongst 1835 adults, men were perceived to be better at taking risks and negotiating profitable deals.^[1]

On gender-based comparison of the responses from our study, the majority of men agreed that there was no sex-based difference in qualities such as GS, OS as well as intelligence and considered men to be better in risk-taking as well as decision making, whereas women were deemed to be better with regards to honesty, negotiating skills, and mentorship. In the case of women, the majority reported that there is no gender-based difference with regard to intelligence, providing fair wages to employees, and mentorship skills, whereas females were considered to do better in the case of CN, GN, and OS.

Statistics from several studies bring into light the undeniable gender disparity in sharing household work and parental responsibilities. A survey conducted in 2002 amongst dermatology residents revealed that 70% of women's parents reduced their working hours to cater to their parental responsibilities as compared to 11% of the male parents.^[14] Similarly, in our study, the majority i.e. 71% dermatologists said that they had reduced their working hours and amongst these, 78% were women as compared to only 45% men, and this difference was statistically significant. The maximum number of volunteers in our study (49.7%) thought that their partner could

contribute more to household/parental responsibilities to improve work-life balance. The gender-based difference in the response was statistically significant with 55% women and only 31.5% men marking "yes."

The "slippery slope" of the competing demands of home and work, coupled with lower job satisfaction, results in the inevitable "burnout" for most women [Figure 6]. In our study, the majority i.e. 47% women agreed to have experienced burnout as compared to only 21% of men. As per the 2018 Medscape National Physician Burnout and Depression Report, 48 percent of women physicians reported burnout compared to 38 percent of men.^[15] We found that a large percentage of the women i.e. 35% agreed to have faced discrimination as against only 3% of men, and the gender-based differences weresignificant.

According to a recent survey in the United States of America, the majority of women in AD also report having faced pregnancy or parental status-based discrimination at the workplace.^[3] Furthermore, the lack of professional support, inadequate opportunities for professional development, and promotion ultimately result in unequal prospects for leadership culminate into what has been termed as "the glass ceiling," an "unseen" but very much existent barrier that prevents women from reaching senior leadership positions.^[3,16,17]

Participants were asked to choose the best possible solution to bridging the gender gap. The majority (47%) chose "flexibility regarding schedules related to household work and parental responsibilities" to be the best possible solution followed by "assigning work and asking for help" which was opted for by 19.9% of the respondents.

Study limitations include the self-reported answers creating the possibility of gender-based differences in responses. Furthermore, the ratio of women and men in our study was disproportionate.

Literature and personal experiences of successful women leaders in dermatology offer some insight into dealing with the gender gap in dermatology leadership. Women in leadership positions translate into a greater number of women mentors and role models for the next generation of women.^[3,4,10] The role of men as mentors, colleagues, or partners is essential in bridging the gender gap.^[4]

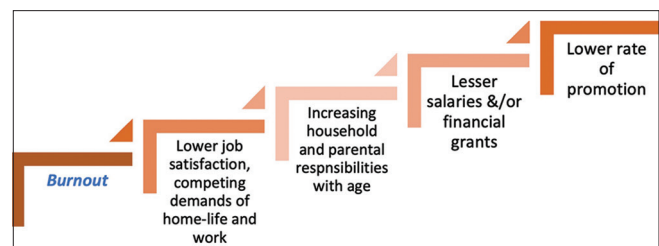


Figure 6: The "slippery slope" of the competing demands of home and work, coupled with lower job satisfaction, resulting in the inevitable "burnout" for most women

Maintaining work-life balance through time management, successful mentorship, effective planning, and communication with the partner are paramount. Sharing of household and childcare responsibilities, discussion regarding work schedules, prioritizing, and avoiding rigidity are some of the key lessons towards a healthy work-life equilibrium.^[4,10]

Gender sensitization, creating a room for equivalent opportunities, offering equal financial support and leadership opportunities will tip the balance in favor of gender parity in academic dermatology.^[4]

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Conflicts of interest

There are no conflicts of interest.

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