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Issues Faced by Senior Women Physicians: A National Survey

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Abstract

Background: As the first large numbers of female physicians complete their careers, information is needed to enable institutions and individuals to optimize the final career phase and transition to retirement of these women, as well as to help younger women physicians prepare for later phases of their careers.
Materials and Methods: To identify the leading issues for older female physicians, a 34-item electronic questionnaire covering heath, finances, preparation for and attitudes about retirement, caretaking responsibilities, life-work integration, various aspects of discrimination and harassment, professional isolation, and work-related stress and burnout-incorporating standardized measures of career satisfaction was distributed through the Kansas Medical Society and nationally through the American Medical Association Senior Physicians Section newsletter to female physicians older than 60 years in 2018. A total of 155 physicians self-identified as eligible and completed at least half of the survey.
Results: Respondents were 60–87 years of age, mean 70.4 (±6.4) years. The majority reported good health and being financially well prepared for retirement. Twenty percent were caretakers for grandchildren, parents, or spouses. Measures of career and job satisfaction were reasonably high, despite negative work environment and burnout scores. Problems with family/career balance, age- and gender-based discrimination and harassment, salary inequity, and professional isolation persisted throughout their careers, but diminished in frequency for senior women.
Conclusions: Issues faced by younger women physicians do not disappear with age or seniority. To recruit and support female physicians, issues such as balancing family/work responsibilities, combating harassment and bias, and promoting healthy work environments must be addressed throughout their entire careers.

Keywords: senior women physicians, work-life integration, gender-based discrimination, age discrimination, loneliness

Introduction

The percentage of women entering U.S. medical schools has risen from under 10% in the 1960s to over 50% in 2017.[1] As women who entered the profession in the 1970s and 1980s finish their careers, medicine faces the first large wave of women transitioning into retirement. More than 19,000 female physicians are expected to retire between 2018 and 2021.[2,3] By 2025, 42% of physicians will be women, and 36,316 will retire by 2030.[3]

The literature regarding older physicians almost exclusively concerns males. A major focus is on clinical competence, but gender differences among this cohort are not consistently reported.[4–13] For male physicians in the final career stage, studies, editorials, and personal narratives highlight the roles of work overload, frustration, burnout, health issues, career satisfaction, and financial security.[14–23] Reviews of the male physician retirement transition identify financial preparedness, health, personal issues, and workplace accommodations during the preretirement period as key issues.[24] Female physicians have little information to help navigate the final phases of their careers. A single study published in 1990 of 21 female physicians 59–95 years of age found two-thirds worked after the age of 65 years, and the most common reasons for retirement were personal illness and wish to pursue nonmedical interests.[25] The size and date of this study limit its applicability.

With the limited available data, we hypothesized that senior female physicians face issues in several areas. Some,

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such as health and financial concerns, may be similar to those reported for their male colleagues; others, such as caregiving responsibilities, gender discrimination, or sexual harassment, may be unique to the experiences of women in a traditionally male-dominated profession. Information on the prevalence and impact of these issues is urgently needed to enable institutions and individuals to optimize the final phases of the careers and the transition to retirement of the increasing numbers of female physicians.

Materials and Methods

To validate and explore the issues identified from the literature review (Table 1), we conducted focus groups with female physicians 60 years of age or older in three urban Kansas communities in 2016 and 2017. These discussions with female physicians in academic and private practice informed the design of a 34-item electronic questionnaire that was sent to female members of the Kansas Medical Society, 60 years of age or older, and then inserted into the American Medical Association (AMA) newsletter on June 21, 2018, with support of the AMA Senior Physicians Section.

The questionnaire incorporated standardized measures of career satisfaction [the Job Satisfaction Scale,[26] Satisfaction with Life Scale (SWLS),[27] and Imposter Syndrome Scale (ISS)],[28] plus the work-related stress and burnout scale (Mini-Z).[29] For several items such as work/life integration, discrimination, and harassment, respondents were asked to rate their experiences at early career, mid-career, and late career. Work/life integration was addressed as two sets of questions, one assessing the impact of work responsibilities on family life and a second assessing the impact of family responsibilities on work. Participants were provided space on the survey for free text for some answers, such as identifying those for whom they provided care. Institutional Review Board approval was obtained for the focus group and survey phases of the study.

Results

Participants

Only questionnaires that were at least 50% complete were reviewed for this study. Questionnaires that were >50% complete were received from 155 female physicians 60 years of age or older in 39 states and Washington, District of Columbia (Table 2). Participants were 60–87 years of age [mean 70.4 (±6.4) median 69]. The majority were white (91.6%), non-Hispanic (85.8%), and married (64.5%), and had children (74.8%). Most were graduates of U.S. medical schools (83.9%) and residency programs (92.9%). Respondents represented 22 medical specialties, with the largest numbers in family medicine (20.1%), internal medicine (11%), and pediatrics (11%). Practice environments were predominantly urban (65.2%) and 65% reported private practice. Sixty-three (40.6%) respondents were retired, 47 (30.3%) worked full time, and 41 (26.5%) worked <39 hours per week. The mean age at retirement was 65 (range: 55–78) years. There was a significant positive correlation between age and retirement status, $r(150) = 0.439$, $p < 0.001$, as well as between marital status and retirement status, indicating that those who are married were more likely to be retired, $r(150) = 0.220$, $p = 0.007$. Of those working, 54 (34.8%) anticipated retiring within 5 years and 17 (11%) within 6–10 years. Eleven (7.1%) respondents anticipated never retiring.

Table 1. Key Concerns for Senior Female Physicians Identified by Literature Review

Health issues
Financial concerns
Caretaking
Career satisfaction/burnout
Balancing personal and professional lives
Workplace isolation, discrimination, and harassment
Adjustment to retirement

Health issues

''Excellent'' or ''great'' personal health was reported by 53 (39%) respondents and ''good'' by 52 (38.5%) (Table 3). Four (3%) reported ''poor'' personal health. Overall, 111 (75%) of respondents reported having someone to take care of them, if needed. Husbands/partners were the most frequently identified individuals (69%), followed by children (24%). There were no significant correlations between health and retirement status or health and age.

Financial issues

One hundred ten (74.3%) respondents reported managing their own finances (Table 3). About half [71 (48%)] used professional resources and 30 (21%) relied on a family member or friend to manage their money. Financial planning for retirement was rated as ''extremely'' ($n = 43.29\%$), ''very'' ($n = 69.47\%$), or ''somewhat'' ($n = 22.15\%$) well prepared. Eleven (7.4%) reported feeling ''slightly'' or ''not at all'' prepared for retirement. However, 48 (32%) reported remaining in practice to improve financial security. There was a significant positive correlation between retired status and financial preparedness for retirement, $r(144) = 0.268$, $p = 0.001$. About half of respondents (48%) reported experiencing salary inequity during early career and almost one third (32.6%) in late career (Table 5). The percentage of women reporting frequent salary inequity diminished from early (32.6%) to late career (13.3%).

Retirement attitudes

Positive or very positive attitudes toward retirement were reported by 72 (48%) of respondents who had not yet retired, 38 (25%) had negative feelings, and 40 (27%) were afraid of retirement. Major factors influencing retirement decisions, each cited by about 30% of respondents, were ''desire to explore other interests,'' ''lack of satisfaction practicing medicine,'' and personal health. Another 20% identified the changing emphasis of medicine and increasing use of technology. Other factors included family issues (15%), difficulty staying up to date in specialty (11%), workplace disrespect (9%), work/home interference (7%), loss of interest in medicine (4%), and home/work interference (2%).

Career satisfaction and burnout

Overall career satisfaction: Participants were asked to rate their overall career satisfaction on a scale of 1 to 100, with 100 indicating the most satisfaction (Table 4). Those who worked full time reported an average rating of 85.36 (±13.39), those

TABLE 2. DEMOGRAPHICS (N= 155)

Age		Specialty	*n* (%)
Median	69	Family medicine	31 (20.1)
Average	70.4	Internal medicine	17 (11.0)
SD	6.4	Pediatrics	17 (11.0)
Range	60–87	Psychiatry	16 (10.3)
		Obstetrics and gynecology	11 (7.1)
Ethnicity	*n* (%)	Anesthesiology	9 (5.8)
Non-Hispanic/Latino	133 (85.8)	Emergency medicine	6 (3.9)
Hispanic/Latino	5 (3.2)	Neurology	5 (3.2)
No answer	17 (11.0)	Dermatology	4 (2.6)
		Endocrinology	4 (2.6)
Race	*N* (%)	Neonatology	4 (2.6)
White or Caucasian	142 (91.6)	Ophthalmology	4 (2.6)
South Asian or Indian American	5 (3.2)	Radiation oncology	4 (2.6)
East Asian or Asian American	4 (2.6)	Infectious diseases	3 (1.9)
Native Hawaiian/Pacific Islander	1 (0.6)	Otolaryngology	3 (1.9)
Prefer not to answer	3 (1.9)	Pathology	3 (1.9)
		Radiology	2 (1.3)
Marital status	*n* (%)	Rheumatology	2 (1.3)
Married	100 (64.5)	Cardiology	2 (1.3)
Divorced	26 (16.8)	Gastroenterology	1 (0.6)
Single	18 (11.6)	Administration	1 (0.6)
Widowed	10 (6.5)	Surgery	1 (0.6)
Cohabitating with partner	1 (0.6)	No answer	5 (3.2)
Children	*n* (%)	Medical school	*n* (%)
Yes	116 (74.8)	In the United States	130 (83.9)
No	39 (25.2)	Outside the United States	20 (12.9)
		Prefer not to answer	5 (3.2)
Employment status	*n* (%)		
Retired	63 (40.6)	Residency	*n* (%)
Full time (40+ hours a week)	47 (30.3)	In the United States	144 (92.9)
Part time (<39 hours a week)	41 (26.5)	Outside the United States	5 (3.2)
Prefer not to answer	4 (2.6)	Prefer not to answer	6 (3.9)
Caretaker	*n* (%)	Practice area	*n* (%)
No	120 (77.4)	Urban	101 (65.2)
Yes	31 (20.0)	Semiurban	42 (27.1)
Prefer not to answer	4 (2.6)	Rural	12 (7.7)
When will you retire, if not already	*n* (%)	Practice setting (could be multiple)	*n* (%)
Within the next 12 months	11 (7.1)	Private practice	98 (26.2)
1–5 Years	43 (27.7)	Outpatient	96 (25.7)
6–10 Years	17 (11.0)	Inpatient	75 (20.1)
>11 Years	1 (0.6)	Hospital-affiliated practice	63 (16.8)
Never	11 (7.1)	Academic medicine	11 (2.9)
No answer or not applicable	72 (46.4)	Other	31 (8.3)

SD, standard deviation.

TABLE 3. HEALTH AND FINANCIAL ISSUES

	n *(%)*[a]
Current health reported as ''good, great, or excellent''	105 (77.7)
Identified support person	111 (75%)
Manages own finances	110 (74.3%)
Extremely or very well prepared financially for retirement	112 (75.7%)
Very or somewhat prepared to arrange own health insurance after retirement	141 (95.9%)

[a]*Note:* Percentages based on numbers answering individual questions.

who worked part time 85.14 (±23.22), and retirees 88.38 (±15.24). There was no significant difference between those currently working and retirees.

Satisfaction with life scale. Participants were asked to rate their life satisfaction on a scale of 3 to 21, with 21 being the most satisfied. Those working full time had an average rating of 16.35 (±4.02) compared to 17.00 (±3.99) for those working <39 hours a week, and 16.91 (±2.98) for retirees.

Imposter syndrome scale. Participants were asked to rate their overall career experience on a scale of 9–63, with 63 indicating a lower feeling of being seen as an impostor. Those working full time reported an average rating of 51.26 (±7.00) compared to 50.11 (±8.83) for part time, and 48.03 (±9.43)

Table 4. Satisfaction, Burnout, and Imposter Syndrome Issues

	Full time Average (SD)	*Part time Average (SD)*	*Retired Average (SD)*
Overall Career Satisfaction (Participants were asked to rate their overall career satisfaction on a scale of 1–100, with 100 being the highest satisfaction)	85.36 (13.39)	85.14 (23.22)	88.38 (15.24)
JSS (Participants were asked to rate their job satisfaction on a scale of 1–6, with 6 being the highest satisfaction. Retirees rated most recent job)	4.67 (1.05)	4.73 (1.12)	4.97 (0.8)
SWLS (Participants were asked to rate their life satisfaction on a scale of 3–21, with 21 being the highest satisfaction)	16.3 (4.02)	17 (3.99)	16.9 (2.98)
ISS (Participants were asked to rate their overall career satisfaction on a scale of 9–63, with 63 indicating a lower feeling of imposterism)	51.26 (7.00)	50.11 (8.83)	48.03 (9.43)
Mini-Z (Participants were asked to rate their most current workplace environment on a scale of 10–50, with 50 being the most joyful work environment)	32.17 (6.51)	35.86 (5.88)	32.41 (6.40)
Burnout (Participants were also asked a one-item burnout question, with a possible score of one to five, with five indicating more burnout. Retirees rated burnout at time of retirement)	3.44 (1.03)	4.09 (1.15)	3.76 (1.64)

ISS, Imposter Syndrome Scale; JSS, Job Satisfaction Scale; SWLS, Satisfaction with Life Scale.

for retirees. There was c significant correlation between ISS and SWLS ($p = 0.007$), indicating that those who were more satisfied with their life felt less like an imposter.

Work-related stress and burnout (Mini-Z). Participants were asked to rate their current or most recent workplace environment on a scale of 10–50, with 50 being the most joyful work environment. Those working full time had an average rating of 32.17 (±6.51) compared to 35.86 (±5.88) for part time. Retirees rated their last work environment at 32.41 (±6.40). Participants were also asked a one-item burnout question regarding how they felt currently or at the time of retirement. This question had a possible score of one to five, with five indicating more burnout. Average burnout scores were 3.44 (±1.03) for full time, 4.09 (±1.15) for part time, and 3.76 (±1.64) for retirees.

Caretaking responsibilities

Thirty-one (20%) respondents reported current caretaking. Of the 24 who identified individuals, 10 (41%) cared for grandchildren, 9 (38%) for elderly mothers, and 7 (29%) for spouses. Six caretakers (25%) were responsible for more than one person. The median time devoted to caretaking was 7 (range: 1–40+) hours per week. Fourteen (45.2%) caretakers worked full time; 3 (9.7%) worked part time; and 14 (45.2%) were retired.

Life-work integration

Impact of work responsibilities on family life. Work impacted family life for 76.9% of respondents during early career, 71.2% during mid-career, and 50% during late career (Table 5). The frequency of work/home interference was lower during late career, but 32% still reported work/home interference ''occasionally'' and 15.9% ''frequently.'' In their early and mid-careers, 48% and 38% of respondents, respectively, reported ''frequent'' work/home interference.

Impact of family responsibilities on work life. Interference with work responsibilities by demands from home was reported by 45.9% in early career, 42.1% in mid-career, and 21.1% in late career. Frequent home/work interference was only reported by 6% in late career compared to 14% in mid-career and 20% in early career.

Table 5. Life Balance, Professional Isolation, Discrimination, Harassment, Abuse, and Salary Inequity Issues

	Career stage		
	Early	*Mid*	*Late*
Work impacting family life		*n* (134)	
% Reporting any	76.9	71.2	50.0
% Reporting frequently	47.8	36.4	15.9
Family responsibilities impacting work/career		*n* (134)	
% Reporting any	45.9	42.1	21.1
% Reporting frequently	19.6	14.3	6.0
Professional isolation		*n* (132)	
% Reporting any	49.2	40.9	33.6
% Reporting frequently	23.5	18.2	18.3
Gender-based discrimination		*n* (134)	
% Reporting any	76.1	56.7	35.8
% Reporting frequently	35.1	13.4	10.5
Sexual harassment		*n* (135)	
% Reporting any	51.9	27.4	10.4
% Reporting frequently	17.0	3.7	1.5
Age-based discrimination		*n* (135)	
% Reporting any	17.0	13.3	28.1
% Reporting frequently	5.2	4.4	11.9
Age-based verbal abuse or bullying		*n* (134)	
% Reporting any	21.5	9.7	13.4
% Reporting frequently	7.4	3.0	3.7
Experienced any salary inequity		*n* (135)	
% Reporting any	48.1	42.9	32.6
% Reporting frequently	32.6	22.6	13.3

Gender-based discrimination

Seventy-six percent of respondents reported experiencing gender-based discrimination in their early careers, 56.7% during mid-career, and 35.8% in late career (Table 5). The highest rate of ''frequent'' gender-based discrimination (35%) was in early career, but in late career, 25% reported ''occasional'' and 10.5% reported ''frequent'' experiences.

Sexual harassment

Sexual harassment was reported by 51.9% of respondents in early career, 27.4% in mid-career, and 10.4% in late career (Table 5). Frequent sexual harassment was reported by 17% during early career, but lesser than 5% at later stages. Ten percent of late-career female physicians reported ''occasional'' sexual harassment.

Age-based discrimination and harassment

Age-based discrimination was reported by 28.1% of women in late career compared to 17% in early and 13.3% in mid-career (Table 5). In late career, 11.9% reported this was ''frequent'' and 18% ''occasional.'' Verbal abuse or bullying based on age was reported by 21.5% in early career, 9.7% in mid-career, and 13.4% in late career. Such abuse was mostly infrequent.

Professional isolation

One third of respondents reported feeling lonely as a female physician during late career and 46% after retirement. In early career, 49.2% of the current senior female physicians reported professional isolation. This was rated as ''frequent'' for 24% during early career, 18% in mid-career, and 15.7% during late career. Among retirees, 8.5% indicated feeling isolated after retirement.

Discussion

The number of female physicians in older age groups continues to grow, but, as noted in 1990, ''little is known about women physicians in their senior years.''[25] This is the first study to attempt to provide information that can be used to optimize the final stages of female physicians' careers and facilitate retirement transitions. It can also help to inform changes in health care to improve the lives and careers of women physicians at all ages.

In studies dominated by male physicians, satisfaction in retirement is most strongly related to health, financial security, and a sense of optimism.[20] Health issues have been traditionally the leading reason for retirement, but more recent literature expresses growing concerns about challenging work environments and related stressors. Our respondents had more negative attitudes toward retirement than generally reported for male physicians, which was not expected. However, they reported similar health status to that reported for male colleagues.

Information is needed regarding financial stressors faced by senior women physicians, as they may be more financially vulnerable in retirement than male colleagues. A 2018 AMA survey found that 43% of all respondents were ''very satisfied'' and 35% were ''satisfied'' financially with retirement, but did not report gender differences.[30] The majority (76%) of respondents in our study described themselves as ''extremely'' or ''very'' well prepared financially for retirement, despite reporting career-long salary inequities that were most prevalent early in their careers. Our respondents may have achieved comparable rates of financial satisfaction by extending their working lives—one third of respondents had previously or were currently continuing to work due to financial concerns. In a 2015 AMA report, 39% of female physicians older than 60 years reported being ''behind where they would like to be in saving for retirement,'' and ''enough money to retire'' was the leading financial concern of all female physicians.[31] However, in a 2013 study, older female family medicine faculty members were less concerned about financial planning for retirement than their male colleagues.[32] Many factors could contribute to financial insecurity for older female physicians, including cumulative salary inequity,[33] traditionally selecting or being encouraged to enter lower-paid specialties, or low priority of personal financial issues compared to service. This area merits further study and action to remove stereotypical gender roles regarding which specialties women are encouraged to pursue and addressing gender-based income inequities in all specialties.

Work-life integration for women physicians has traditionally been focused on pregnancy and childcare issues. This study demonstrates that the interplay of work and family life impacts the entire career of a female physician. Throughout their careers, female physicians reported that work had more impact on family life than vice versa, suggesting personal and family sacrifices to sustain work responsibilities. The impact of work on family life was reported by over 70% of women earlier in their careers, and nearly 16% of senior women physicians reported frequent impact of work on family life. While the needs of younger physicians must continue to be addressed, many late career female physicians also require support to maintain family responsibilities.

Half of the survey respondents experienced the impact of family responsibilities on work life later in their careers. One-fifth of the survey respondents were primary caretakers for one or more family members, which was not unexpected, given the input from the focus groups and lifelong societal gendered expectations. Caretaking roles encompassed a range of dependents, with grandchildren as the largest group. Caretaking of grandchildren in this study mirrors national trends. Around 2.7 million U.S. grandparents are raising their grandchildren, and this is increasing rapidly.[34] Caretaking responsibilities have been related to increased risks for stress and burnout among female physicians.[35] This study suggests that this risk is not limited to mothers of young children, although institutional policies and practices continue to be almost exclusively oriented to supporting younger caregivers. With growing numbers of women of all ages in the workforce and recognition of diverse forms of caretaking responsibilities, health care systems should become ''caring companies'' in which employee benefits are adapted to the changing needs of individuals and families across the lifespan.[36]

Age discrimination is increasingly being discussed in the literature in a variety of fields, with women more likely than men to be victims.[37] However, less is known about gender-based age discrimination in medicine. Related intergenerational conflict and adjustment issues around loss of role and prestige have been noted to be prevalent in academic

physicians, but gender differences have not been reported.[38–42] As noted among women in other fields,[43] participants in this survey study noted age discrimination early and later in their careers. The former may reflect concerns regarding experience and attractiveness.[37] Later in their careers, as noted by members of the focus groups in this study, women experience the spectrum from ''invisibility'' and perceived technical incompetence or being ''out of date'' to overt insults based on physical or intellectual attributes. Future studies should explore the impact, including gender-based differences, of age discrimination on the mental health of physicians, as studies in other fields have noted the negative impact that this form of discrimination has on the mental health of women, but not of men.[44]

The incidence of sexual harassment in all fields has gained increased attention in the area of the #metoo and #TimesUp movements. Approximately 80% of professional women have been reported to be victims of some type of sexual harassment.[45] Medicine is not immune to this, with reported incidences similar to those in other fields.[46] However, most studies on sexual harassment tend to focus on young and middle-aged women and do not examine issues later in women's careers.[45] The women in this study reported prevalent gender-based discrimination and sexual harassment throughout their careers. While the prevalence and severity decreased with advancing career stage, these issues persisted for a significant number of female physicians into late career. Seventy-six percent of this group of female physicians in early career and 38.5% of physicians in late career reported gender discrimination, with 10% of the latter reporting this frequently.

One form of discrimination and denial of opportunities is related to presumed lack of professional and intellectual competence, despite the extensive evidence that women's scholarly productivity in late career equals or surpasses that of male colleagues.[47–62] Sexual harassment was reported by 52% of women in early career, 27% of respondents during mid-career, and 10.4% later in their careers. This finding of continued sexual harassment in late career is new, but not unanticipated, as sexual harassment does not reflect sexual attraction, but is a means to exert control and is more likely to be inflicted upon accomplished, highly educated women.[63] The focus groups reported that the nature of sexual harassment changed with age to incorporate disrespect and negative comments about appearance, clinical competence, and technical expertise, as well as overtly sexual and physical elements. In addition to negatively impacting a woman's career, gender bias and sexual harassment are both linked to the development of burnout. Efforts to address gender discrimination and sexual harassment need to be expanded and need to include the risks to women at all stages of their careers.

As noted by some focus groups members in this study, satisfaction with work may influence the decision to retire. Older female physicians have been reported to have higher work satisfaction and less burnout than other groups, but data are limited, particularly in primary care specialties.[64–67] Research in other fields has demonstrated gender-based differences in burnout incidence, with men having decreased incidence with age, while women demonstrate bimodal peaks from the ages of 20–35 years and again older than 55 years.[68] These may represent times of increased demands on women at work and at home. Research is needed in medicine to determine if similar ages of peak risk exist to help inform interventions. Despite bias, discrimination, and harassment, the respondents in this study reported moderately high career and life satisfaction scores. However, they also exhibited concerning scores for negative work environments, burnout, and work-life and life-work interference.

The prevalence of loneliness among the female physicians in this study is of concern, given the negative impact of loneliness on mental and physical health and the association with burnout. This result is not unanticipated, as medicine has recently being described as ''one of the loneliest professions''.[69] The limited literature to date demonstrates no gender-based differences in the prevalence of loneliness among physicians,[70] as male and female physicians likely have common issues in developing supportive relationships within and outside of work due to constraints on their time and consequent limited opportunities for social engagement. However, these challenges may be even more significant for women in light of the additional demands on their time outside of the workplace. In addition, women physicians have described feeling isolated and marginalized, especially if working in environments that were predominantly male, often leading to loneliness.[71] Additional study is needed to identify causes of loneliness among women physicians, including those issues faced by women who are also underrepresented minorities, and any impact of the changing demographics in medicine.

This study provides insight into issues faced by senior women physicians, but has several limitations. Several items, especially those related to work-life integration, discrimination, and harassment, depended on recall of experiences across careers and could be subject to bias. In addition, the number of participants was small and limited to those AMA members who received and were motivated to respond to the questionnaire, and who self-identified as women physicians over 60 years and older. Their perspectives may not represent those of the majority of older women physicians. The Senior Physician Section did not provide data regarding the number of women physicians in the section or to how many the survey was sent. We were also unable to obtain data regarding how many intended recipients of the survey received or opened it, making it impossible to calculate a response rate. However, this study provides preliminary data for future work, which, based on study design, may provide opportunities to better assess response rate. The absence of diversity is a major issue in interpreting our findings. The Senior Physician Section did not provide data regarding the racial makeup of their membership.

During the period of time in which physicians of this age attended medical school, there were few women and even fewer people from racial minority backgrounds.[72] Our respondents represent a unique cohort of women who entered the profession decades ago when beliefs, attitudes, and accepted behaviors were quite different and when there was less racial or ethnic diversity in medicine. The experiences of a more diverse group of women in the coming years may differ. Given these limitations, the consistent themes raised in the focus groups and the survey results provide important insights into the issues faced by senior female physicians, which can serve to inform future research. Additional studies are needed to confirm these results and to identify other concerns, especially those unique to subgroups of female physicians such as those who represent racial or ethnic

minorities in medicine, those who are sexual orientation or gender minorities, and for those in specific specialties or types of practice. This will require approaches that specifically reach out to this enlarging cohort of physicians.

A primary finding of this study is the glaring demonstration that issues faced by young female physicians may change as their careers develop, but do not disappear. Some of the issues reported by women in this study, especially the almost universal experience of age and gender discrimination and sexual harassment, have been addressed with policy, social, and other changes over recent decades.[73] However, significant issues remain, and continued vigilance and improvement are warranted, including for women during the mid-career and late career stages when they may have unique vulnerabilities in the workplace. Policies and programs designed to support women, for example, family leave, salary equity, or those addressing bias and harassment, need to be implemented across the entire career in all specialties. Information on the prevalence and impact of these issues, as well as studies of targeted interventions, are urgently needed to enable institutions and individuals to optimize the final career phase and the transition to retirement of the increasing number of female physicians.

Conclusion

Despite the obstacles they experienced and continue to experience, the women in this study expressed great pride in their careers and enthusiasm for medicine. Many were reluctant to retire. This could be influenced by the unique ''pioneer pride'' of this cohort of senior female physicians, who have found ways to survive and navigate in a changing profession.[74] Their experiences are important to inform and implement changes that can improve the lives and careers of the current and upcoming groups of senior women physicians. Nevertheless, it is important to continually assess the environment of medicine and appropriately adapt to changing needs. Younger physicians, especially from groups that are underrepresented in medicine, may face different issues in progressing through careers in a profession with increasing numbers of women and, hopefully, a more positive and supportive career environment.

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