Differences in the Professional Satisfaction of General Internists in Academically Affiliated Practices in the Greater-Boston Area

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Managed care has created more professional constraints for general internists. We surveyed 198 general internists at 12 academically affiliated practices in the greater-Boston area to examine professional satisfaction. Overall, these physicians were moderately satisfied (mean of 59.1 on a 100-point scale). Before adjustment, women had lower overall satisfaction than men, as well as poorer satisfaction with the domains of career concerns and patient access. Gender had no independent effect on satisfaction after adjustment for age, income, percentage of time providing direct patient care, work status, and site. Younger physicians also had lower overall satisfaction, and these differences remained after adjustment. Improvements in professional satisfaction may be required to ensure the continued recruitment of young physicians, particularly women, into general internal medicine.

KEY WORDS: **physician satisfaction; primary care; women; academic health centers.**
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Physicians are more likely to be effective if they are satisfied with their work environment.[1,2] Managed care has produced increasing financial and time constraints for general internists. As recent graduates increasingly opt for careers in primary care,[3] and women make up an ever larger proportion of general internists,[4] it is particularly important to examine the professional satisfaction of these groups.

In this study, we examined two issues: the level of satisfaction among general internists practicing in a variety of academically affiliated settings in the greater-Boston area, and whether women and younger physicians are less satisfied than their peers.

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METHODS

Sample

General internists practicing at 12 participating sites in the greater-Boston area in February 1996 were eligible. These sites all received malpractice coverage through a Harvard-based insurance program, but were diverse in location, structure, and the degree of academic affiliation. The sites included six hospital-based practices, two university health services, a large group model HMO, two neighborhood health centers in disadvantaged communities, and a suburban group practice. The smallest site employed 5 physicians, and the largest site employed 36 physicians. Both full-time and part-time providers were eligible for this study. Physicians in training (i.e., residents and fellows) were not included. A self-administered, anonymous survey was mailed to all eligible physicians. Nonrespondents to the first survey were sent two additional mailings and received a telephone call. Of the 222 eligible physicians, 198 (89%) responded. Surveys were completed between March and May 1996.

Measurement

Physicians were asked to rate their satisfaction on a 5-point scale for 34 separate items that were intended to reflect different dimensions of satisfaction and were derived from previously described surveys.[2,5–9] Factor analysis was used to cluster related items and to construct subscales. These analyses suggested that there were five distinct domains of satisfaction: (1) career concerns, (2) intellectual environment, (3) practice infrastructure, (4) patient access to care, and (5) patient coverage issues. The internal consistency of each of these sub-scales was 0.86, 0.79, 0.77, 0.70, and 0.67, respectively. Scores measuring these five domains of satisfaction were constructed by taking the mean of the nonmissing items and transforming the score to range from 0 (extreme dissatisfaction) to 100 (extreme satisfaction). A global satisfaction score was created by taking the mean of all 34 items.

Statistical Analysis

To examine whether age and gender were associated with differences in satisfaction after adjusting for other potential predictors, multiple linear regression was used (SAS/STAT, SAS Institute, Cary, NC, 1990). Independent variables included: age (<40 years, 40–49 years, and ≥50

years), income (<$80,000 per year, $80,000–$99,999, $100,000–$119,000, ≥$120,000), work status (full-time, part-time), work site (examined individually as well as categorized as hospital-based, HMO, university health services, and other community-based practices), and percentage of time devoted to patient care, teaching, research and administration.

RESULTS

Demographic information, overall and by gender, is displayed in Table 1. Thirty-seven percent of the sample were women. The women were significantly younger, were less likely to work full-time, and received a lower income than men. Women also spent more time in direct patient care and were less likely to participate in research. The mean overall satisfaction score was 59.1 (SD 12.1). Satisfaction was lowest for career concerns (mean 53.3; SD 15.7) and highest for satisfaction with the intellectual environment (mean 70.7; SD 14.5). Mean scores were 53.9 (SD 14.6) for infrastructure, 57.6 (SD 17.1) for patient access to care, and 69.9 (SD 16.9) for coverage issues.

Women physicians had significantly lower overall satisfaction than men, as well as lower satisfaction with career concerns and patient access to care (Fig. 1). After adjustment for differences in age, work status, income, percentage of time providing care, and site, there were no significant gender differences in overall satisfaction or any of the specific domains. In separate stepwise models to see how each independent variable affected the relation between gender and satisfaction, age, income, and percentage of time providing patient care, all independently adjusted the unadjusted differences in satisfaction by gender. With the small sample, we could not look at interaction.

Before adjustment, younger physicians had significantly lower overall satisfaction, as well as lower satisfaction with career concerns, patient access to care, and coverage issues (Fig. 2). These differences persisted after adjustment.

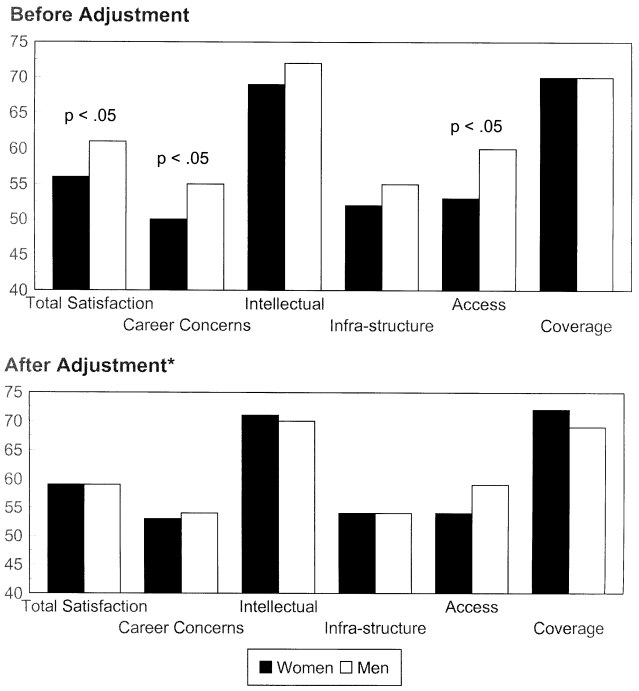
DISCUSSION

This study suggests that general internists in a variety of academically affiliated practice settings in the greater-Boston area are only moderately satisfied with their work experience. Women physicians are less satisfied than men, although these differences were no longer apparent after adjusting for differences in age, the percentage of time providing direct patient care, work status, site, and income. Younger physicians were also less satisfied, and these differences persisted after adjustment.

Table 1. Description of the Study Sample

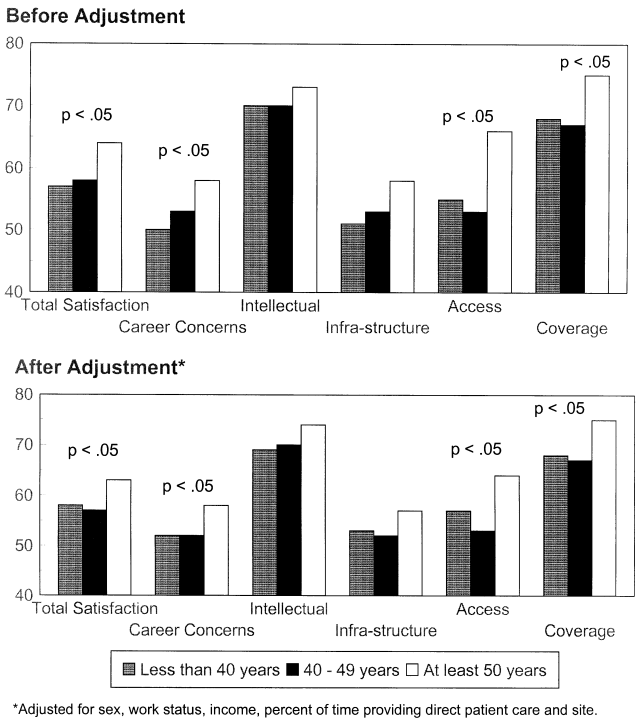
Characteristic	Overall Sample *N* = 198	Women *n* = 74	Men *n* = 124
Mean age (range), years	45.2 (28–87)	42.5 (32–67)	46.6 (28–87)*
Annual income, %			
Less than $80,000	17.1	22.5	13.8*
$80,000–$99,999	23.0	40.9	12.1
$100,000–$119,999	19.8	18.3	20.7
At least $120,000	40.1	18.3	53.5
Full-time work status, %	77.3	56.8	89.5*
Percentage of time, patient care, %			
Less than 50%	34.8	28.4	38.7*
50%–79%	29.8	25.7	32.3
At least 80%	35.4	46.0	29.0
Percentage of time, teaching, %			
None	13.0	16.4	10.8
Less than 10%	48.7	41.1	53.3
At least 10%	38.3	42.5	35.8
Percentage of time, administration, %			
None	15.0	17.8	13.3
Less than 20%	45.1	50.7	41.7
At least 20%	39.9	31.5	45.0
Some percentage of time in research, %	43.9	23.0	56.5*
Work site, %			
Hospital-based	61.1	58.1	62.9
University health service	18.7	17.6	19.4
HMO	11.1	10.8	11.3
Other, community-based	9.1	13.5	6.5

**Difference between women and men significant at* $p < .05$ *level by* χ^2 *or Student's* t *test.*



*Adjusted for age, work status, income, percent of time providing direct patient care and site.

FIGURE 1. Differences in satisfaction scores by gender.



*Adjusted for sex, work status, income, percent of time providing direct patient care and site.

FIGURE 2. Differences in satisfaction scores by age.

The professional satisfaction of general internists is important for several reasons. General internists are more likely to be effective if they are satisfied.[6] Also, since the professional satisfaction of role models influences the specialty choices of medical students,[10] ensuring the satisfaction of academic general internists, especially women and younger physicians, is critical to the future supply of generalists.

To some extent, the unadjusted and adjusted satisfaction scores lead to some different conclusions regarding satisfaction in this sample. There has been some debate as to the importance of adjusting patient satisfaction scores for differences in demographic characteristics,[11,12] and those arguments possibly apply here also. Moreover, it might be argued that if gender is causally related to the factors such as income and percentage of time in patient care, then adjustments are not appropriate. In any event, we think that presenting both is helpful.

The fact that conclusions regarding gender changed suggests that women are not inherently less satisfied with their work experience than men, but that seniority and objective differences in their work structure may explain this variation. Women physicians may be more likely to have practices with a high proportion of managed care patients,[4] and this may be associated with dissatisfaction with the amount of time spent with patients and colleagues. Women physicians may also receive lower salaries and have slower rates of promotion than men.[13,14] The lower satisfaction of women in our sample with career concerns complement these findings. Recent work has suggested that the career development of women in academic medicine can be improved through salary equity and mentoring.[15] Perhaps these interventions also will improve the professional satisfaction of women physicians.

Younger physicians also were less satisfied, and these differences persisted after adjustment. Younger physicians may have fewer professional opportunities than in the past, and this uncertainty may adversely affect satisfaction.[3] Younger physicians may also be given less choice of patient and call schedules than older, more established physicians. Recent work suggests that organized activities to promote physician self-awareness may improve professional satisfaction and clinical care.[16] Perhaps the incorporation of these types of activities into medical training and continuing education programs will help physicians make appropriate career choices and improve professional satisfaction.

Our findings are limited to the settings that we examined and may not be generalizable to physicians in other geographic areas or practice structures. We did, however, examine physicians at a variety of practice settings. Although we believe that it would be important to examine the effect of race and ethnicity on physician satisfaction, our sample did not include many minority physicians, and we did not inquire about race on the survey to protect their confidentiality. In an effort to keep our survey brief, we did not inquire about satisfaction with nonprofessional domains or how professional satisfaction may affect overall life satisfaction. Also, with our small sample, we were unable to look at interactions among the various predictors.

Our study demonstrates that general internists in a variety of academically affiliated settings are only moderately satisfied with their professional lives. Interventions directed at improving the professional satisfaction of general internists and reducing disparities in satisfaction by age and gender should be considered to ensure the continued recruitment of young physicians and women into general internal medicine.

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