

Annotated Bibliography: Academic Medicine

Virginia Valian
Hunter College and CUNY Graduate Center

Ash, A. S., Carr, P. L., Goldstein, R., & Friedman, R. H. (2004). Compensation and advancement of women in academic medicine: Is there equity? *Annals of Internal Medicine*, 141, 205-212, W43-W44.

A 1995/1996 survey of 1814 full-time medical school faculty in 24 schools found sex differences in achievement of full professorship and in salary (for physicians only) via linear and logistic regression analyses that used as predictors physician status, department type, minority status, chair or chief, school, years of seniority, hours worked per week, and number of career publications. For the full professor analysis, only faculty with at least 10 years of seniority (n = 864) were included; each additional year of seniority was worth less to women than to men. At all levels of productivity, women are less likely than men to be full professors. Underrepresented minority faculty were less likely to be full professors. Female physicians earned less than male physicians, nonphysicians earned less than physicians, underrepresented minorities earned less than whites.

Baker, L. C. (1996). Differences in earnings between male and female physicians. *The New England Journal of Medicine*, 334, 960-964.

For physicians below the age of 45, with 2-5 years of experience, there no income disparity once one adjusts for: a) *hours worked per week* – men work 62, women work 51, b) *specialty* – men work in more remunerative specialties than women (in 4 highest-paying fields [radiology, general surgery, anesthesiology, subspecialty surgery], 27% of men practice, 14% of women; in 3 lowest-paying fields [general practice, pediatrics, general internal medicine], 42% of men practice, 55% of women), c) *practice setting* – men work in more remunerative settings, and d), *miscellaneous factors* – AMA membership, marital status, etc.

For physicians with 6-9 years of experience, women make 96% of men's income even after adjustments. For physicians with 10 or more years of experience, women make 85% of men's income even after adjustments.

Benz, E. J., Jr., Clayton, C. P., & Costa, S. T. (1998). Increasing academic internal medicine's investment in female faculty. *American Journal of Medicine*, 105, 459-463.

How medical schools can improve the status of female faculty.

Cain, J. M., Schulkin, J., Parisi, V., Power, M. L., Holzman, G. B., & Williams, S. (2001). Effects of perceptions and mentorship on pursuing a career in academic medicine in obstetrics and gynecology. *Academic Medicine*, 76, 628-634.

A 1998 survey of residents (n=4659) and fellows (n=811) in obstetrics and gynecology found sex differences among first-year residents in likelihood of pursuing a career in academic medicine, with 80 % of women considering such a career compared to 72 % of men. By the fourth year, however, interest in both groups had dropped to 66%. Serious sex differences in residents' perception of recruitment, career advice, and supervisors' attitudes were also apparent. Although a large minority of each sex (45 % of men and 42 % of women) perceived no gender bias in faculty recruiting, 17 % of men compared to 45 % of women saw bias in favor of men, while 38 % of men and 13 % of women saw bias in favor of women. A majority of each sex (64 % of men and 58 % of women) saw no bias in career advice, but 10 % of men and 34 % of women thought men were more likely to receive helpful career advice, while 26 % of men and 8 % of women thought women were more likely to receive helpful career advice. Most men saw no gender bias in supervisors' attitudes (63 %), as did a substantial minority of women (46 %). The sexes agreed that, if condescension was displayed by supervisors, it was more likely to be displayed toward a woman (27 % of men and 50 % of women agreed). A majority of nonwhite residents (60 %) thought whites were more actively recruited for faculty positions, while most whites (56 %) thought that there was no bias.

Carr, P. L., Ash, A. S., Friedman, R. H., Scaramucci, A., Barnett, R. C., Szalacha, L., Palepu, A., & Moskowitz, M. M. (1998). Relation of family responsibilities and gender to the productivity and career satisfaction of medical faculty. *Annals of Internal Medicine*, 129, 532-538.

A 1995 survey of 1963 medical school faculty at 24 medical schools, with three age groups (< 40, 40-49, > 50), measured aspirations, attitudes, institutional support, perceptions of obstacles to advancement, time spent on child care, and productivity.

To measure aspirations and goals, the researchers used 5-point scales, where 5 indicated great aspiration or agreement. Among faculty with children, women had lower aspirations than men to be department chair (although neither group had much: 1.9 for women, 2.4 for men) or full professor (although the numerical difference was small: 3.8 compared to 4.0). Women more strongly than men endorsed the statement that nonprofessional goals were as important as professional goals (4.1 compared to 3.7). For faculty without children, women and men were equally uninterested in being department chair (1.9 compared to 2.1) and equally interested in becoming full professor (3.8 for both). But childless women gave more importance to their nonprofessional life than did childless men (3.9 compared to 3.6).

Among faculty with children, women were less likely than men to receive research funding from their institution (46.5 % compared to 57 %) and had less secretarial assistance. Women also reported less career satisfaction than men (5.9 on a 10-point scale compared to 6.6). For faculty without children, there were no sex differences in research funding from the institution (51 % for both) and no sex differences in career satisfaction (5.9 for women and 6.1 for men).

Among faculty with children, women reported spending more time on child care responsibilities (22 hours/week) than did men (14 hours/week). At rates ranging from double to triple the rates for men, women reported as problematic meetings outside of normal weekday times, absence of a parental leave policy, absence of other family leave policy, absence of on-site child care, and absence of emergency child care. Among faculty without children, women did not find meetings more of a problem than did men, but they did find the absence of family leave policies much more of a problem.

Data on productivity largely mirror previous studies. Women with children do not publish less than women without children. Career publications (means adjusted for school, specialty, race, year of first faculty appointment, age, and marital status) for women with children numbered 18.3 and for men with children numbered 29.3 (a significant difference); for faculty without children, the comparison was 17.6 for women and 20.5 for men (not significant).

Carr, P. L., Ash, A. S., Friedman, R. H., Szalacha, L., Barnett, R. C., Palepu, A., & Moskowitz, M. M. (2000). Faculty perceptions of gender discrimination and sexual harassment in academic medicine. *Annals of Internal Medicine*, 132, 889-896.

A 1995 survey of 1963 medical school faculty at 24 medical schools, with three age groups (< 40, 40-49, > 50), found sex differences in experiences of discrimination and harassment. With respect to gender bias, 60 % of women compared to 9 % of men reported experiencing it. With respect to harassment (defined as experiencing unwanted sexual advances, subtle bribery to engage in sexual behavior, threats to engage in sexual behavior, or coercive advances), 29 % of women compared to 3 % of men reported experiencing it.

Fried, L. P., Francomano, C. A., MacDonald, S. M., Wagner, E. M., Stokes, E. J., Carbone, K. M., Bias, W. B., Newman, M. M., & Stobo, J. D. (1996). Career development for women in academic medicine: Multiple interventions in a department of medicine. *Journal of the American Medical Association*, 276, 898-905.

The Johns Hopkins University Department of Medicine successfully developed a program to advance women from assistant professor to associate professor.

Nonnemaker, L. (2000). Women physicians in academic medicine. *New England Journal of Medicine*, 342, 399-405.

How many associate or full professors "should" there be, given the number of assistant or associate professors? Via cohort data of medical school graduates from 1979 to 1993, Nonnemaker shows that at both the associate and full level, more women would be expected than are present, even controlling for specialty. Income figures show advantages for women over men in pediatrics and family medicine; those advantages do not carry over to promotion where, in almost every specialty where there are enough numbers for a meaningful comparison, men are advantaged relative to women.

Trix, F. & Psenka, C. Exploring the color of glass: letters of recommendation for female and male medical faculty. (2003). *Discourse and Society*, 14, 191-220.

Letters of recommendation for successful female and male medical faculty showed differences in terms used to describe them and in the length of letters. Letters for females were shorter than those for males; included more phrases expressing doubts about the candidate; used more "grindstone" adjectives; mentioned their sex more often; were more likely to include only minimal information; mentioned their personal life more often. Letters for males, compared to letters for females, included more repetition of standout words like "outstanding", "excellent", and "superb"; included more references to research, skills and abilities, and career; included fewer references to training and teaching; mentioned their publications, vita, patients, and colleagues more often. Letter writers are at risk of underselling the abilities and qualifications of the women they write for and of overselling the abilities and qualifications of the men they write for.