not accurately reflect what constitutes satisfying sex in this population, yielding falsely low scores.

Women who reported greater importance of sex had higher maintenance of sexual activity. In contrast, we found that sexual function, as measured by the FSFI, is not associated with maintenance of sexual activity. This suggests that the “quality” of sex does not affect whether a woman will continue to have sex over time. Midlife women have many reasons for engaging in sex that go beyond “quality.”

These findings challenge prior assumptions about female sexual function in midlife. As we study and care for these women, a more nuanced understanding of female sexuality is essential.

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2011), and 145 editorial board members who met the inclusion criteria. We classified the sex of 98% of the eligible individuals: 6511 first and senior authors of original research and editorials, 16,021 reviewers, 7 editors in chief, and 144 editorial board members.

Our findings are shown in the Figure. The percentage of women who were first author of original research ranged from 23.7% (NEJM) to 46.7% (BMJ); for last author, the range was 18.3% (Lancet) to 28.8% (BMJ). The percentage of women who were the first author of editorials ranged from 18.0% (NEJM) to 27.4% (BMJ); for last authors, the range was 19.6% (NEJM) to 32.3% (Ann Intern Med). The percentage of female reviewers ranged from 16.6% (NEJM) to 28.8% (BMJ). Four of the editors in chief were women and 3 were men. The percentage of women on editorial boards ranged from 22.2% (NEJM) to 41.7% (JAMA Intern Med).

Discussion | In 2010 and 2011, we found continued increases in the proportion of women among first and senior authors of original research in leading general medical journals compared with the findings by Jagisi et al1 through 2004. The proportion of women who were authors of editorials, editors in chief, or editorial board members also increased. Nonetheless, most research articles and editorials continue to be written by men. Women accounted for less than 30% of the reviewers at each of the 6 journals. Despite these increases, all of the leading general medical journals can further improve the representation of women in many capacities.

Invited Commentary
Shattering the Glass Ceiling

In 1999, I became editor in chief of The New England Journal of Medicine (NEJM)—the first woman to head a major medical journal. At the time, the professional staff consisted of 5 full-time deputy editors, 6 part-time associate editors, 3 statistical consultants, and 1 consultant in molecular medicine. All but the last consultant were men. Of the 24 editorial board members, just 3 were women. A few months later, Catherine DeAngelis, MD, became editor in chief of JAMA, a happenstance so surprising that it warranted a front-page article in the Boston Globe (where I was quoted as saying, tongue-in-cheek, “There goes the neighborhood.”).

But despite the dearth of women in the upper reaches of academic medicine and medical journals, there were already changes under way, as documented by Erren et al1 and by Jagisi et al.2,3 These authors looked at the representation of women as authors of original research articles and editorials, as editorial board members and reviewers, and as members of medical school faculty. Together, they showed how the status of women has changed over the past several decades.

In 1980, when I first joined the staff of the NEJM as assistant deputy editor, only 12% of first authors of research articles were women2 and there were no women on the editorial board.3 At JAMA, there were also no women on the editorial board, and only 4.6% of first authors were women. By 2010-2011, according to Erren et al,1 23.7% of first authors at the NEJM were women, as were 39.3% at JAMA, and women constituted 22.2% of the editorial board at the NEJM and 29.2% at JAMA. Erren and colleagues also looked at 4 other general medical journals—Annals of Internal Medicine, BMJ, JAMA Internal Medicine, and The Lancet—and found considerable variation among the 6. In general, BMJ was at the top in its representation of women (although JAMA Internal Medicine led in the percentage of women on the editorial board and had a percentage of women as first authors of original research comparable to that of BMJ), and the NEJM was at the bottom.

To interpret these data requires looking at medical schools, because authors, editorial board members, and peer reviewers come from the upper rungs of the academic ladder. What is the composition of the pool from which the journals draw? That depends on the level of seniority. In the United States, approximately half of all medical students are now women, but men still outnumber women among faculty members, particularly at the top. (It may be different in the United Kingdom, which might explain the BMJ advantage.) In 2004, only 19% of associate and full professors on the clinical faculties of US medical schools were women, and women composed 38% of assistant professors.3 Calls for journals to invite more women to write nonresearch articles are all to the good4 because they give women more visibility, but until women move up the academic ladder, they will still be underrepresented as authors of research articles. The problem is not so much at the journals as it is at the medical schools.

Have women advanced as fast as they should given the fact that they began to enter academic medicine in large numbers in the 1970s? According to Jagisi et al,2 women made up 14% of all US medical students in 1972 and the same percentage of
full professors among the clinical faculty in 2004. That lag of 32 years for women to climb from medical student to full professor is approximately 10 years longer than for men. Moreover, other data confirm that women are disproportionately represented at the lower rungs of the academic ladder, then they stall and become associate or full professors, if at all, at an older age than their male counterparts.

Why the lag? One factor is probably the reward system in academic medicine. As Jagsi et al point out, “advancement is largely driven by peer-reviewed original research,” particularly that published in prestigious journals. Publication is the coin of the realm. I believe men are more likely than women to devote themselves single-mindedly to research, partly because women are disproportionately tapped for various academic citizenship duties (every committee needs at least 1 woman), and because the child-bearing years coincide with the time of applying for first research grants. Research grants impose a fairly rigid schedule that can conflict with the flexibility needed in those early years. Greater flexibility in the timing of first research grants would help women pursue research careers. Young male physicians are also becoming to value flexibility when their children are young because, unlike their older male colleagues, very few of them have spouses that are housewives; however, the difficulties are not equal. A final possible explanation for the slow advancement of women—one that will pose a fairly rigid schedule that can conflict with the flexibility needed in those early years. Greater flexibility in the timing of first research grants would help women pursue research careers. Young male physicians are also beginning to value flexibility when their children are young because, unlike their older male colleagues, very few of them have spouses that are housewives; however, the difficulties are not equal. A final possible explanation for the slow advancement of women—one that will surprise very few women—is good old-fashioned sexism. This is demonstrated by Lawrence Summers, PhD, the former president of Harvard University, who said the most likely explanation for the relatively low numbers of women scientists is that, compared with men, their brains just aren’t up to the job. (Summers did not explain how their brains evolved fast enough to account for the recent dramatic influx of women in science.)

Despite the difficulties, women are pressing hard against the glass ceiling, and it will inevitably shatter. But progress is too slow. One reform that should be instituted—not just because it would further equality between men and women, but because it would be of great benefit to academic medicine—is to change the reward system. Anecdotal evidence suggests that women do more than their share of teaching and mentoring. Those activities should be a basis for promotion, at least as much as publications are. The primary mission of medical schools is, after all, to educate the next generation of physicians. Clinical research and medical practice are important parts of that mission, but secondary. Faculty researchers often do little or no teaching, yet advance rapidly on the basis of their publications, while excellent teachers languish at the lower rungs of the academic ladder. Too many men (and women) are doing pedestrian research simply to be promoted. Doubtless, one reason institutions reward research over teaching is that research grants bring in more money than does tuition. Yet, medical schools have an obligation to do better by their students and the physicians who teach them. In recent years, there has been a certain amount of hand-wringing about the reward system, with some increased recognition of teaching, but there is still nothing close to parity.

This is not a matter of suggesting that standards for promotion be lowered so that women have an easier time getting to the top. On the contrary, I am recommending that the top be redefined. I do not advocate a lowered glass ceiling, but rather, placing the ceiling over a different edifice. Research productivity should no longer be considered the primary measure of academic success. If teaching and mentoring are rewarded commensurately with research, women will do very well. In fact, men might well have to work harder than they are now to catch up with women in these areas. In any case, I have no doubt that physicians would be better educated and that the medical literature would be less voluminous but of higher quality. And the glass ceiling would shatter that much faster.

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COMMENT & RESPONSE

Optimizing the Impact of Drugs on Symptom Burden in Older People With Multimorbidity at the End of Life

To the Editor We commend Chaudhry et al1 on their excellent article that reported high prevalence of symptoms that negatively affect functioning and quality of life in a cohort of older community-dwelling people with multimorbidity and a life expectancy of less than 1 year.

In older people, multimorbidity often coexists with polypharmacy, commonly defined as the use of 5 or more drugs. In her Invited Commentary, Ritchie2 highlights that pharmacological treatment of 1 symptom may exacerbate another or a coexisting condition, which may in part explain the increase in symptoms in this population.

To minimize drug-related symptoms in older people at the end of life, pharmacological treatments should be prioritized and rationalized. Symptomatic relief should take preference over preventive treatments, and drug therapies deemed no longer necessary should be stopped to minimize cumulative drug-related adverse effects. For instance, among patients in their


